

THE JOY OF REPAIR



HONDA

HONDA & ACURA ULTRA-HIGH-STRENGTH STEEL (UHSS)



Repair Guidelines for HSS Parts

I-CAR New Mixed Materials Attachment Methods Course

Fits Right The First Time

CCC Carwise Referrals

BRN Prologue Update



Genuine Wholesale Parts
Collision & Mechanical



Genuine Wholesale Parts
Collision & Mechanical

Honda/Acura Ultra-High-Strength Steel (UHSS)

Ultra-high-strength steel (UHSS) isn't new—Honda began integrating it into vehicles in 2009 to improve crash performance while managing weight. Today, every Honda & Acura vehicle platform includes 1500 MPa UHSS in the body structure, making this a perfect time for a quick refresher on why it matters and which SIS resources to use when planning repairs involving UHSS.

What Counts as UHSS (and Why the Definition Matters)

Honda defines ultra-high-strength steel (UHSS) as any steel with a tensile strength of 980 MPa or higher. That threshold is critical because repair limitations and joining requirements become progressively stricter as tensile strength increases.

UHSS on Honda Vehicles: A Quick Timeline

980 MPa UHSS first appeared in Honda vehicles in 2009 with the Honda Pilot. 1500 MPa UHSS arrived later—introduced in 2012 with the 2012 Honda Pilot and then used more broadly in the 2013 Accord.

From Center Pillar Reinforcement to the "Door Ring Assembly"

Originally, 1500 MPa UHSS was used in a specific area of the center pillar to enhance rollover protection. That approach evolved into Honda's engineered "Door Ring Assembly", introduced on the 2014 Acura MDX. The "Door Ring" is a hot-stamped, single-piece 1500 MPa steel component that generally integrates the Front Pillar (A pillar/windshield pillar), Sill Reinforcement, Roof Side Rail, and Center Pillar (B pillar).

Critical Repairability Rule: No Straightening (Cold or Heated)

Cold or heat must not be used when straightening UHSS. Either approach can compromise the internal structure of high-strength steel parts. Any UHSS component that has had heat or cold straightening applied during repair must be replaced with a new part. Ignoring these instructions can significantly reduce occupant protection in any subsequent collision.

Match the Procedure to the Steel's Tensile Strength

Steel repair and welding procedures vary depending on the tensile strength of the parts involved. Before sectioning, straightening, or joining any structural component, confirm the material grade and follow the model-specific body repair guidance.

Where can I find the tensile strength of the metals?

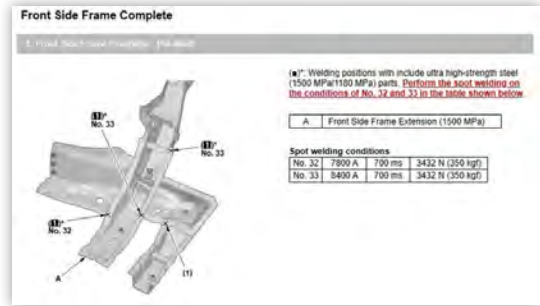
A simple approach when Repair Planning, is to review the **Body Repair News** document within SIS. The **Body Repair News** document is assigned to each model platform and provides a quick visual reference of the model steel construction. For more specific information about the tensile-strength information, always refer to the body construction section of the **Body Repair Manual**.



Honda/Acura Ultra-High-Strength Steel (UHSS)

Spot Welding UHSS: Follow the OEM "Spot Welding Conditions"

When spot welding UHSS body parts is required, always refer to Honda's Spot Welding Conditions for Ultra High-Strength Steel Parts (1180 & 1500 MPa) document within the Service Information System (SIS) (see example below). Those spot welding conditions are also reflected directly in the **Body Repair Procedures** for installing UHSS body parts—so verify settings and required tests before you weld.



MAG Welding on UHSS: Approved High-Strength-Steel Welding Wire Is Mandatory

If MAG welding is required on a UHSS body part, the use of Approved High-Strength-Steel Welding Wire is mandatory. Refer to the Approved High-Strength-Steel Welding Wire document in SIS to confirm the wire you plan to use is on Honda's approved list.

Product Name	Supplier	Contact Info
Bohler Union X96	Pro Spot Honda Snap-on	https://prospot.com https://honda.snapon.com
Titan Technology EQ-5029X96	Equip Automotive	www.equipmyshop.com or call (866) 362-4400
Washington Alloy Eagle-Arc 980X	Washington Alloy Co.	www.weldingwire.com or call (888) 522-8296

Note: Bosch DS980J has been discontinued, but can still be used.

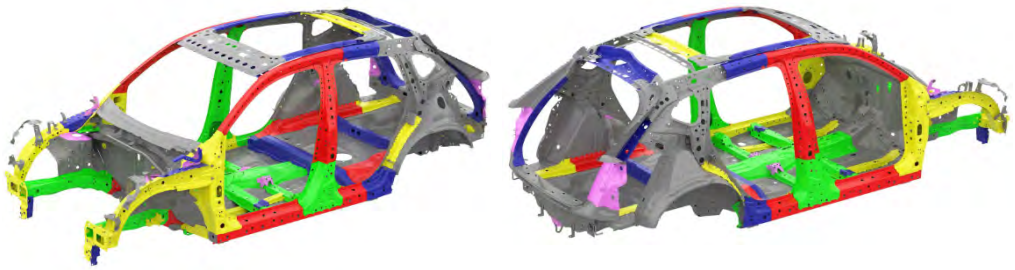
Double-Check Repairability: Use the Honda/Acura Steel Usage & Repairability Matrix

For further confirmation on what's permitted (and what's not), refer to the Honda/Acura Steel Usage and Repairability Matrix within SIS. This resource helps ensure the correct joining method is used for the steel grade in front of you—supporting safe, repeatable repairs.

Honda/Acura Ultra-High-Strength Steel (UHSS)

SIS Documentation Quick Reference:

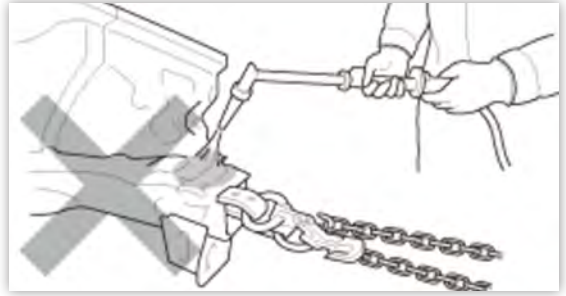
SIS Document / Section	What to use it for (Repair Planning)
Body Repair News (model platform specific)	Quick visual reference of the model's steel construction to help identify where higher-strength materials are used.
Body Repair Manual > Body Construction section	Primary source for detailed tensile strength/material information and construction details when you need the most specific guidance.
Spot Welding Conditions for Ultra High-Strength Steel Parts (1180 & 1500 MPa)	Required spot-welding settings/conditions for 1180/1500 MPa parts; confirm the conditions match the model's Body Repair Procedures.
Approved High-Strength-Steel Welding Wire	Mandatory reference when MAG welding UHSS—verify the wire you plan to use is on Honda's approved list.
Steel Usage and Repairability Matrix	Confirms what repair/joining methods are permitted by steel grade and location to support safe, repeatable repairs.



Repair Guidelines for High-Strength Steel Parts

High-strength steel (HSS) is common in modern vehicle structures—but it behaves very differently from conventional mild steel.

Its increased rigidity and “memory” can make straightening and weld removal more challenging, and improper techniques (especially heat) can permanently compromise strength and crash performance. Use the guidelines below to protect repair quality, tech safety, and occupant protection.



- **Pull gradually and measure often:** Apply frame pulls slowly and monitor body dimensions continuously to return the structure to specification.
- **No straightening above 590 MPa:** HSS parts over 590 MPa must not be straightened. Replace them if damaged.
- **Never use heat during straightening:** Heat (e.g., oxyacetylene torch) can alter internal structure; any heated part must be replaced.
- **Use HSS-rated spot-weld tools:** Proper cutters/bits reduce time and prevent excess heat that can weaken HSS.

⚠ WARNING

High strength steel is designated as any steel with a tensile strength of 340 MPa or higher. Ultra high strength steel is defined as any steel with a tensile strength of 980 MPa or higher. If a part is constructed of, or includes, high-strength steel, observe the following important guidelines:

Body and Frame Straightening Guidelines

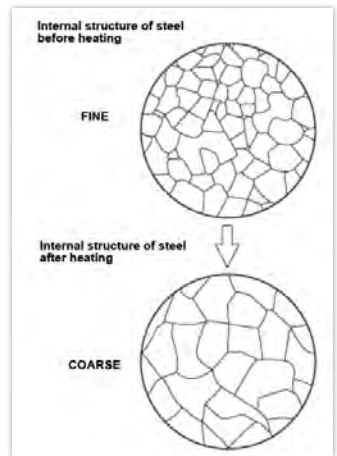
Because HSS is more rigid and has more memory than traditional steel, it can be **more difficult to straighten**. When using frame straightening equipment, apply pulling force gradually and closely monitor body dimensions throughout the process so the structure returns to the proper specifications. **High-strength steel parts over 590 MPa must not be straightened.** If these parts are damaged, they should be replaced with new parts.

NOTE: Do not apply heat—such as an oxyacetylene torch—to any body part during straightening. Heat may compromise the internal structure of the metal, including high-strength steel parts. **Any part that had heat applied during straightening MUST be replaced with a new part.** Ignoring these instructions may significantly reduce occupant protection in any subsequent collision.

Removing Spot Welds on High-Strength Steel

Use a spot weld cutter or drill bit designed for high-strength steel to remove spot weld nuggets from the steel parts being removed. If cutting performance decreases, **reground the cutter** with a grinder as soon as possible or **replace it with a new cutter**. Poor cutting performance increases cutting time and generates heat that may compromise the internal structure of high-strength steel parts.

NOTE (Tool Protection & Clean Cuts): To protect the spot cutter blade, mark the center of the spot-weld nugget with a center punch, then grind the edge of the nugget flat using a belt sander (about P60) before cutting. Apply the specified cutting oil during cutting work to protect the blade.





Mixed Attachment Methods: Building the Skills Today's Vehicles Demand

Page 1 of 2

Modern vehicles are more complex than ever. High-strength steel, aluminum and multi-material assemblies have become standard across many OEMs which require collision repair technicians to master an expanding range of joining techniques to perform complete, safe and quality repairs.

Recognizing this shift, I-CAR® developed the **Mixed Attachment Methods** course: an in-shop, hands-on training experience that consolidates the joining techniques and repair methods most frequently referenced in OEM collision repair procedures into a single, practical exercise. I-CAR conducted pilot sessions and voice-of-customer feedback throughout the development process to ensure the course reflects the practical needs of both technicians and repair facilities. Delivered in-shop, the training utilizes a realistic vehicle-like prop designed to mirror the progression of attachment methods used in actual structural repairs.

To further support technicians before they step into the course, I-CAR offers a free **"What to Expect" online course**, which includes a downloadable repair manual and guidance to help technicians build confidence ahead of the in-person skills session.

What the Course Covers

Technicians follow a sample OEM repair procedure to demonstrate mastery of multiple attachment methods essential for repairing mixed-material vehicle structures:

- Rivet Bonding
- MAG Welding
- MIG Brazing
- Steel Sectioning
- Spot Welding

These skills are already embedded in I-CAR's **ProLevel® 2** and **ProLevel® 3** training requirements. What Mixed Attachment Methods does differently is consolidate them into a single exercise, confirming a technician's ability to apply various joining techniques in real-world scenarios.

Mixed Attachment Methods is designed to confirm a Platinum™ Structural Technician can execute what OEM repair procedures require, consistently and accurately.



Genuine Wholesale Parts
Collision & Mechanical



Genuine Wholesale Parts
Collision & Mechanical

Mixed Attachment Methods: Building the Skills Today's Vehicles Demand

Page 2 of 2

What It Means for Gold Class® and Platinum™ Recognition

Mixed Attachment Methods replaces the current Steel Sectioning Recertification requirement for **Platinum™ structural technician role** recognition. It's a meaningful update that reflects how structural repair requirements have evolved alongside vehicle design. For technicians on the Platinum Path, this course is now the benchmark for demonstrating proficiency encountered in today's structural repairs.

For shops, the stakes are equally clear. Mixed Attachment Methods will be **required for Gold Class® renewals beginning July 1, 2027**. For any shop that relies on Gold Class® status to signal quality and earn OEM network recognition, building this competency now is the straightforward path to staying ahead of the requirement.

The Bigger Picture - With a Honda Lens

The launch of Mixed Attachment Methods reinforces a core principle I-CAR has championed since 1979: training must evolve alongside vehicle technology. As modern vehicles incorporate advanced materials and multiple joining methods within a single repair, the ability to properly execute OEM procedures has become essential for complete, safe, and quality repairs.

For Honda and Acura vehicles, this alignment is especially important. Honda repair procedures often specify precise joining methods to maintain structural integrity and crash performance. For shops in the Honda & Acura Certified Collision Repair Network, Mixed Attachment Methods provides added confidence that technicians can accurately follow complex repair procedures that ensure Honda's safety systems will perform as designed. This is also important for maintaining the shop's I-CAR Gold Class Status, which is a certification requirement for the Honda & Acura Certified Collision Repair Network.



For more information, visit

info.i-car.com/network-programs/oem/Honda.



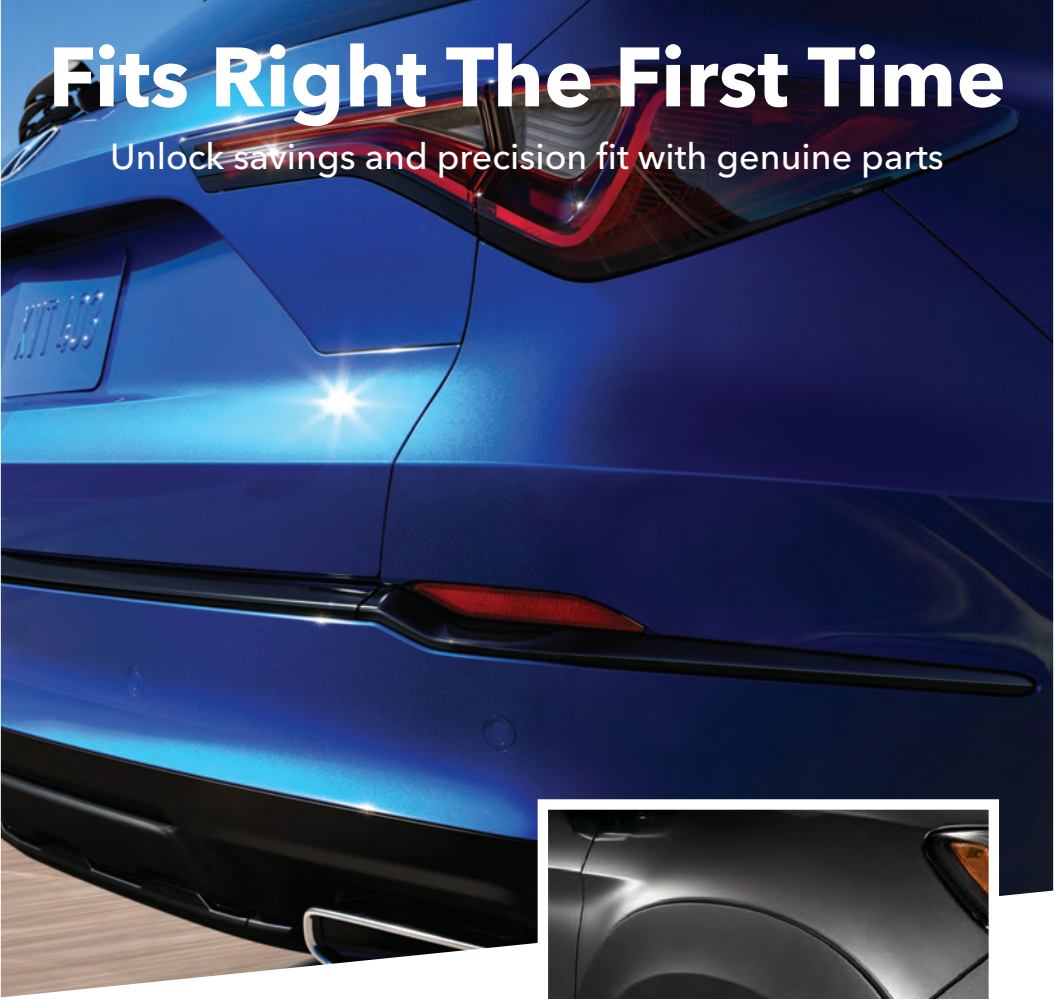
Genuine Wholesale Parts
Collision & Mechanical



Genuine Wholesale Parts
Collision & Mechanical

Fits Right The First Time

Unlock savings and precision fit with genuine parts



- Save time and money: reduce returns by up to 16%
- Faster ordering process
- More accurate orders
- Easier invoice processing
- Live information
- Seamless fit
- Competitive pricing



Order now on CCC ONE®



Genuine Wholesale Parts
Collision & Mechanical



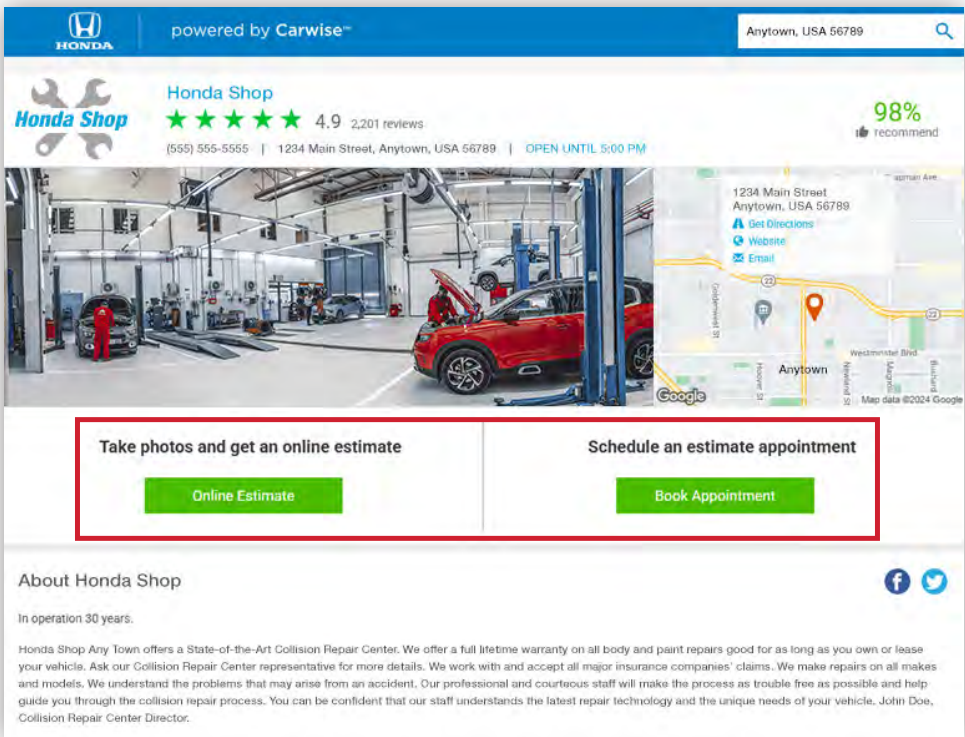
Genuine Wholesale Parts
Collision & Mechanical

Customer Referrals by Honda & Acura Certified Collision Locator powered by Carwise™

What's New

The Honda & Acura Certified Collision Network Locator—powered by Carwise™—now supports customer referrals through online appointment booking, enabling customers to schedule directly with a certified collision repair facility.

For repairers, access to appointment-booking functionality in Carwise™ requires a subscription to CCC® Engage, a consumer engagement product, in CCC ONE®. CCC Engage also supports digital estimate requests and other customer-facing tools designed to capture and convert leads.



Leveraging your Honda & Acura Collision Certification

The Honda and Acura Certification is a powerful differentiator—but only if consumers can easily find you and take action. By offering online booking and digital estimate options to the existing marketing strategy, certified collision centers can reduce friction for customers, respond faster, and stand out from non-certified competitors in the same market.

Learn more: For more information about CCC Engage, talk to your CCC rep today at (877) 208-6155.



Genuine Wholesale Parts
Collision & Mechanical

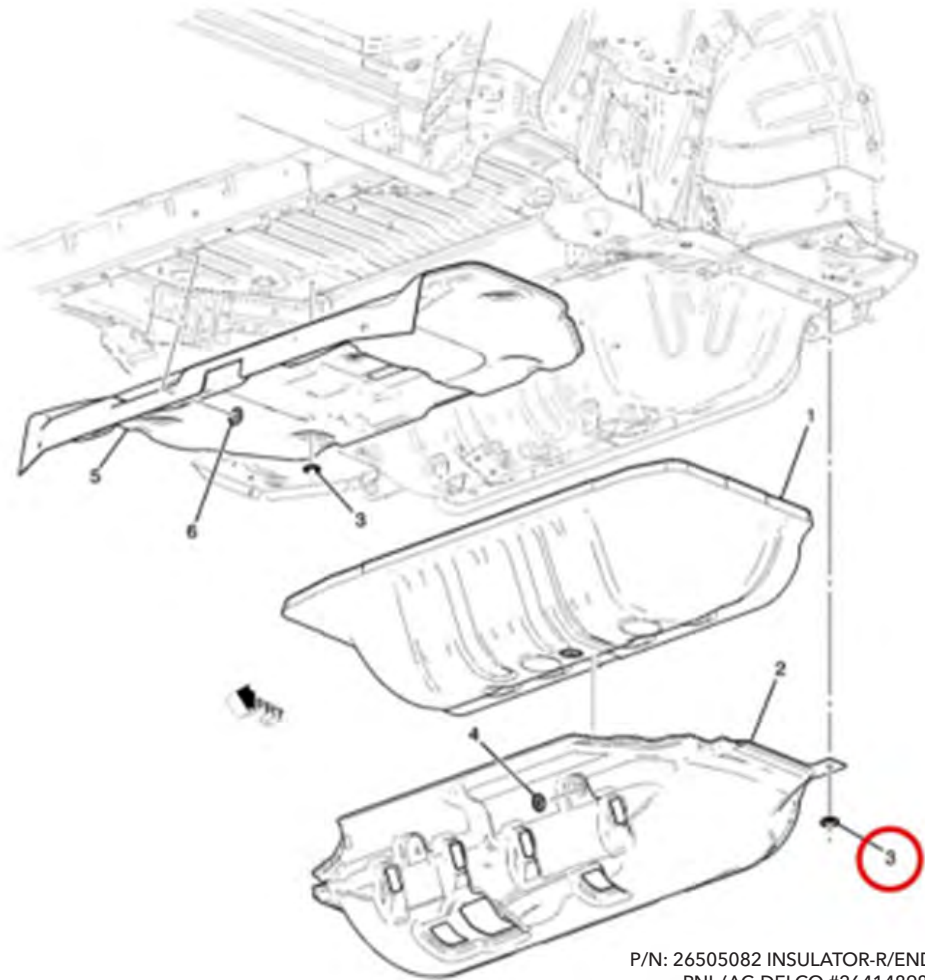


Genuine Wholesale Parts
Collision & Mechanical

Body Repair News Update: **2024-25 Honda Prologue**

REAR FLOOR PANEL INSULATOR

The rear floor panel insulator (3) has been discontinued and is no longer available. If the insulator is damaged, replacement is not necessary. There are no concerns for NVH without this insulator.



P/N: 26505082 INSULATOR-R/END
PNL (AC-DELCO #26414898)

This information is reflected in the updated **2024-25 Prologue:**
New Body Repair Information document in SIS



Genuine Wholesale Parts
Collision & Mechanical



Genuine Wholesale Parts
Collision & Mechanical

HONDA

THE JOY OF REPAIR



HONDA



ACURA



Thank you for your unwavering dedication to quality and for playing a key role in the success of our certified network!

E-mail: HondaandAcuraCollision@ahm.honda.com