HONDA & ACURA COLLISION REPAIR INDUSTRY SUPPORT UPDATE 12/10/15

Presenter: Chris Tobie - American Honda Motor Co., Inc. Parts & Service Communications
BODY STRUCTURE
Minor Model Changes (MMC) & UHSS Locations

Looks Can Be Deceiving - HSS/ UHSS & Minor Model Changes:

- 2012-14 Honda CR-V has a 780 MPa body steel limit – No UHSS
- 2015 model looks similar, but add 980 & 1,500 MPa steel
- Welding restrictions required when repairing 2015+ models
- Using Body Repair News and body repair manual only way to know this!
Door Outer Stiffener Rings Are Constructed of 1,500 MPa steel:
- MUST be replaced as a single assembly if damaged
- Constructed from multiple stampings spot welded together @ factory
- With door ring installed, no spot welder access to factory joints, so they cannot be repaired
- Do not substitute MAG welding or MIG brazing for these factory spot welds!
2016 Civic 4D Body Uses 58% HSS, Incl. 26% UHSS (980+ MPa):

- Next-Generation Advanced Compatibility Engineering™ (ACE™) body structure
- Introducing Honda Sensing™ suite of advanced safety and driver-assistive technologies
- Bolt-on resin composite lower front bulkhead assembly
- Weight-saving 1,500 MPa rear frame rails w/soft zones for impact crush control
- If rear frame damage suspected, measure entire vehicle using 3D measuring system
- If rear frame damaged, replace as a complete assembly only
- Replacement of only rear frame portion not possible (No Sectioning Allowed)
Bosch DS980J MAG Wire  
(Or Equivalent**)  
**MAG welding wire must have tensile strength equal to or greater than lowest tensile strength of parts being welded

Silicon Bronze Wire  
(ERCuSi-A/CuSi-3)

Squeeze-Type Resistance Spot Welder (STRSW)  
(Min. 9000A & 772 lb. Tip Force)

Pulse Controlled MIG Welder  
(180 Amp / 220 V)
New High-Strength MAG Welding Wire Coming Soon!

Honda Sourcing New High-Strength MAG Wire:

- DS980J wire was made available as a “single-source” solution
  - US Supply of Bosch DS980J exhausted. Canada has limited supply
- When welding 590 and/or 780 MPa steel parts, such as some frame rails, 120 ksi MAG welding wire may be used.
  - This wire is usually available from your local welding supply vendor.
- For rare case where 980 MPa plug weld is required contact DES Canada (Dealer Equipment & Services @1-866-868-3372)
- Cannot order wire thru website! Must call
- New wire will also be 0.8 mm & should see significant cost reduction
COLLISION PARTS
Service Parts Configuration Review Process

When Collision Parts Availability Doesn’t Match Market Needs:

- Parts configuration/availability feedback from market
- Parts review process developed with Parts Division in Ohio/Japan & applied to problem
- New service part created & revised BRM sectioning allow proper repair @minimum cost
Ultra High Strength Steel Parts Information Bulletin

**Parts Information Bulletin Link Will Appear In Parts Catalog**

**Parts Information Bulletin Creation Process**

**Field** → **Dealer** → **Field** → **PIB**

**Provide Critical UHSS Repair Info To Dealer Parts Dept.:**

- UHSS info requested by dealers during CSMM dealer visits.
- Helps dealer advise collision customers about repair restrictions during damage estimate - before repairs begin.
- Applied to all current and future PN w/UHSS instructions.
- Bulletin published & linked to parts catalog since Dec 2014.
Ultra High Strength Steel Parts Instructions

UHSS Requires Special Repair Processes:

- Using improper equipment or procedures when repairing UHSS can result in an unsafe repair.
- Provide critical UHSS repair direction to parts installer
- Identified all current service parts containing UHSS
- Agreement to add Instructions to all current & future model UHSS service parts translated to 16 languages
- Currently applying instructions to affected parts

*Example of UHSS Part With Instructions*
• Tech Line is anticipating support of the body shops to be minimal in the beginning.
  – Will need to be monitored for impact to current operations.
• Tech Line will staff with one to two people, based on need, utilizing existing headcount.
• Tech Line operation will remain flexible to adapting to collision shop needs throughout the program.

Blue: Inbound to AHM Tech Line  Red: Outbound from AHM Tech Line

- Leverage new technical assistance hotlines provided by VeriFacts and I-CAR for 1st level technical support.
- Provide 2nd level technical support through American Honda Tech Line - 2 associates trained & taking calls.
- Associate with collision repair experience added in Ohio - Advises Engineering about future model reparability.
1,500 MPa Door Ring Improper Repair Study

- Improper repair duplicated on driver’s side for crash testing
- Used excellent documentation provided by original repairer
- Small Overlap Test (SOT) done according to IIHS specifications
- Results analyzed for collision industry education
New ProFirst & ServiceExpress Trade Show Display

- Supports ProFirst Certified & ServiceExpress initiatives
- Educate industry about complete & proper body repairs
- SOT results comparison – mass production vs. improper repair
- Displayed at major collision industry trade shows
  - NACE, SEMA, AASP/NJ Northeast
SERVICE PUBLICATIONS & TRAINING
Body Repair News Publications

Body Repair News Issues Now Available For:
- 6 Acura model series
- 9 Honda model series
- 2 Non model-specific issues

A FREE Collision Industry Support Publication!
Honda & Acura Body Repair News Answers 7 Important Points:
- Body structure - grades of HSS/UHSS & where
- Aluminum/magnesium body component location & repair
- Heat use during straightening & Sectioning during collision repairs
- Approved welding/brazing procedures and wire requirements
- Airbag system & general electrical repair requirements/guidelines
- Special tool & repair requirements for driver support systems
Applies to ALL Honda & Acura Full Model Changes (FMC) Vehicles From 16 Pilot

**Body Repair Basic (BRB) Manual Contents:**
- Introduction
- Body Structure
- Material Information
- Basic Welding Information
- Body Repair
- Tools and Equipment
- Safety and Cleanliness
- Basic Finish and Paint Information
- Paint Repair Tools and Equipment
- Mixing and Tinting (Mixing Colors)
- Body Paint Repair
- Paint Finish Defects and Prevention
- Safety and Cleanliness
- Spray Gun Basics

**Model-Specific Body Repair Manual (BRM) Contents:**
- Introduction
  - Service & special (safety) information
  - Symbols used in this publication
- General Information
  - Body construction & steel parts grades (MPa)
  - Plastic parts material ID
  - 1,500 MPa parts locations and precautions
- Replacement
- Body Dimensional Drawings
- Rust Prevention

**Same basic info for all models**
- Only changes if basic repair procedures must be changed.
Honda OEM Body Repair Training Now Available:

- First OEM-developed online body repair training delivered by I-CAR
- Leverages I-CAR’s vast market reach
  - HON10e - Using Honda & Acura Service Info
  - HON11e - Honda & Acura High Strength Steel Repair
  - HON12e - Honda & Acura Restraints Collision Repair

**COMING JANUARY 2016!**

- HON14e - Honda & Acura Electrical Collision Repair

**COMING APRIL 2016!**

- HON15e - Honda & Acura A/C Collision Repair
Honda Collision Repair Training Delivered by I-CAR

Honda OEM Body Training Data as of Oct:

- First 3 modules launched Feb-Mar 2015
- 5,845 HON collision modules delivered
- Survey results have been very good
  - Excellent or Very Good to ~80 percentile
  - Good to ~95 percentile
New I-CAR Hands-On MIG Brazing Class Coming January:

- Need for MIG brazing skills will continue to increase
- Hands-on coached skill development training event
- Students expected to complete 8 MIG brazed joints used by different automakers
  - Not all currently used by Honda.
1,500 MPa Steel – Outer Panel MIG Brazing

Single Hole MIG Braze

Used when brazing 1,500 MPa to mild steel (e.g. 270 MPa outer panel)

MIG Brazing Hole Size & Spacing Requirements

(φ = Hole Inner diameter)

MIG Brazing Isn’t Just For Structural Repairs:

- 2014-15 MDX damaged 270 MPa outer panel example
- Outer panel attaches over 1,500 MPa door stiffener ring
  - No MAG welding allowed!
- No spot welder access in large part of attachment area
- Requires ~40 MIG brazed joints as shown
Program Overview

Presented by: Gary Ledoux / American Honda
Honda and Acura products increasingly sophisticated / new technology used

Collision avoidance and mitigation technologies used

Technology for all vehicles evolving at an ever-increasing pace

Today’s technicians must be trained, and continue training to keep up with technology

Today’s technicians must use the correct tools and procedures

Today’s technicians must have access to and use current repair procedures

The “future” has arrived!
It is extremely important to American Honda that Honda and Acura products are repaired correctly and completely at whatever body shop performs the work.

It is extremely important that ProFirst Certified body shops reflect the Honda brand and the quality that Honda and Acura owners have come to expect.
ProFirst Certified is a Win-Win for your shop:

Gain increased recognition for your shop’s professionalism

Helps promote customer confidence and loyalty

Increased opportunities to reach more people.

Receive cost and time-saving tool to help you make a better, faster repair
ProFirst Overview – Qualifications

Basic Knowledge and Skills
I-CAR Gold Class or VeriFacts VQ or Medallion

Tools & Equipment
Such as:
• 3-phase power
• Pulse MIG Welder
• HSS/UHSS MIG Wire
• Spot Welder
Equip required by spec, not brand

Honda / Acura Specific Training
Honda and Acura specific classes produced by AH and delivered by

Facility Requirement
Clean, professional and customer-centric

CSI System
Shop may use any existing commercial existing system as applicable

Req. 1 estimator and 2 steel structural technicians / on-line classes

Or…
ProFirst Overview – Benefits

- Plaque suitable for public display
- Free access to Honda & Acura parts catalogs
- Exterior sign 24” x 24” aluminum sign
- Free access to Service Express repair info
- Free access to technical help line
- Shop name listed on Honda corporate shop locator
Additional benefits include….

Poster for customer waiting area

Window cling signs for posting on doors or windows

Consumer-oriented brochures promoting the ProFirst Certified brand

First access to American Honda press releases, position statements, parts information updates, Body Repair News

Access to the ProFirst logo for advertising purposes

Additional benefits pending…..
**Cost:** $2,700 per year per shop

**Participation:** Limited number ProFirst Certified spots available

**VeriFacts:** Technology partner / website / auditing service

**Axalta Coating Systems:** On-site shop auditing service

For more information or to apply, contact us via email at:

profirst@ahm.honda.com
QUESTIONS?
THANK YOU!