HONDA

Body Repair News

August 2024

Version 1

2025 CR-V e:FCEV (Fuel Cell): New Body Repair Information

APPLIES TO

2025 CR-V e:FCEV Model Series

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>.



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SALES & SERVICE

CR-V e:FCEV (Fuel Cell Electric Vehicle) models are only available for sale in California and will only be sold and serviced at the following authorized dealers.

Authorized Dealers

Northern California		
City	Dealer Name	
Colma	Honda of Serramonte	
Dublin	Dublin Honda	
Oakland	Honda of Oakland	
Palo Alto	Anderson Honda	
Roseville	Autonation Honda Roseville	
San Jose	Honda of Stevens Creek	

Southern California		
City	Dealer Name	
Cerritos	Norm Reeves Honda Superstore	
Culver City	Culver City Honda	
Irvine	Norm Reeves Honda Superstore Irvine	
Pasadena	Honda of Pasadena	
Torrance	Scott Robinson Honda	
Woodland Hills	Woodland Hills Honda	

IMPORTANT NOTICE

Per California fire code, the hydrogen level in the hydrogen tanks must be less than 0.93 kg. before the vehicle is brought inside the shop for repairs related to the hydrogen system. Furthermore, the vehicle must be outside when discharging and purging the hydrogen according to the procedures outlined in this service manual and other available service information. In addition, replacement of the hydrogen tanks requires the hydrogen levels to be less than 1%. These regulations do not apply for servicing or repair of non-hydrogen components such as brakes, suspension, SRS etc.

If you are doing any repairs that involve any hydrogen system or fuel cell system-related components or involve welding or open flame, the vehicle must be taken to an authorized Honda CR-V e:FECV dealer.

Refer to the *Fuel Cell System Component Location* Index in the service information for a complete list of hydrogen and fuel cell system components.

MODEL IDENTIFICATION

By Emblem

Identified by the **e:FCEV** emblem mounted on the tailgate.



By VIN

Characters 4 thru 6 of the VIN will show ZC8 indicating that it is a Honda CR-V e:FCEV.

5J6<u>ZC8</u>*****000001

POST-COLLISION VEHICLE STORAGE

A damaged CR-V e:FCEV can be stored in either an Open Perimeter Isolation or Barrier Isolation.

Open Perimeter Isolation

Vehicle is stored in an outdoor area separated from all combustibles and structures by a minimum distance of 50 feet (15.2 m) from all sides.



Barrier Isolation

- Vehicle is stored in an outdoor area separated from all combustibles and structures with a barrier constructed of earth, steel, concrete, or solid masonry designed to contain a fire and/or prevent the fire from extending to adjacent vehicles.
- The barriers should be of sufficient height to direct any flame or heat away from adjacent vehicles.
- If the barrier is only on three of the four sides of the vehicle, the open side would need to maintain the separation distance of 50 feet (15.2m).
- It is not recommended to fully enclose the vehicle in a structure due to the risk of post-incident fire extending to the structure, and the possibility of trapped explosive or other harmful gases. Therefore, a roof is not recommended for barrier isolation.

INSPECTION AFTER A COLLISION

Thoroughly inspect the high-voltage battery assembly, also known as the IPU, for exterior damages when a damaged CR-V e:FCEV is brought in after a collision. If damages are found, the IPU must be replaced. In addition, if the vehicle was involved in a collision severe enough where the SRS airbags deployed and/or has structural damages, you must inspect the IPU for any leaks.

	YES	Perform the high-voltage battery leak check. Refer to the procedure, IPU Leak Test.
Airbag(s) Deployed	NO	 Check the entire part of side sill and the floor undercovers for any damages (body deformations, scratches, holes, cracks, dents). If there are NO damages, the high-voltage battery is OK. If there are damages, a leak test is required. Refer to the procedure, IPU Leak Test.



HIGH-VOLTAGE POWER CUT-OFF

When the SRS unit detects a collision signal, it sends a collision detection signal (CDS) to the H2 Pyro Switch. The H2 Pyro Switch then stops the power supply to the high-voltage circuit and the hydrogen injector power supply circuit.

Once the signal is received from the SRS unit, the Battery Energy Control Module will open the high-voltage contactor relays, placing the vehicle in a high-voltage lockout state and disabling.

In addition to the opening of the high-voltage contactor relays, a single-use pyro-fuse will be activated whenever the supplemental restraint system (SRS) is deployed. This activated pyro-fuse will inhibit high-voltage current flow out of the battery pack to the under-hood components. Once activated, it cannot be reset and the high-voltage battery assembly must be replaced.



To restore the high-voltage and the hydrogen supply, the SRS system needs to be checked, and the collision shutoff history needs to be cleared using the i-HDS. Refer to the *Collision Shut-off History Clear Command* section of the Electric Powertrain Service Precautions.

HIGH-VOLTAGE BATTERY LOCATION

The high-voltage battery assembly is mounted under the vehicle body.



HIGH-VOLTAGE DISABLING

Always perform the high-voltage disabling procedure prior to removing any high-voltage components and connections. Refer to the *High-Voltage Cut-Off Service Precautions* for the procedure.

NOTE: Unlike other Honda models with electric powertrains, the CR-V e:FCEV is not equipped with a service plug to disable the high-voltage. The orange cable connected to the high-voltage battery must be disconnected.

HYRDROGEN TANK LOCATION

There are two hydrogen tanks located under the vehicle body.



HYRDROGEN LEAK DETECTION

Hydrogen gas is colorless, odorless, and combustible. These qualities make detection difficult and a protentional safety concern in the event of a leak. The CR-V e:FCEV is equipped with 4 hydrogen concentration sensors; and the hydrogen supply is interrupted if excessive hydrogen gas leakage is detected.

The hydrogen concentration sensors are installed on the driver's side and the passenger's side of the fuel cell stack assembly, and near the hydrogen tanks.



12-VOLT POWER INTERUPTIONS

Never disconnect the 12-volt battery supply, remove fuses or relays and connectors while the vehicle is in the ON mode. This may cause a fault of the fuel cell system.

BODY CONSTRUCTION & 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.

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.



AIR PUMP OPERATION

As parts of the fuel cell system, an air pump is equipped on the CR-V e:FCEV. This pump is an essential component that helps with the conversion of hydrogen to electricity. Since air is required upon start of the vehicle, the air pump must operate occasionally when the vehicle is in the OFF mode; You may hear a noise from the vehicle periodically.



The pump also operates to drain residual gas and water in the fuel cell system through the exhaust system. As such, it is normal for the vehicle to expel air through the exhaust system.

The air being expelled from the exhaust can blow dust and debris around the shop and contaminate the intake air to the air pump when the pump is operating potentially damaging the fuel cell system.

When working on the vehicle, do the following to prevent the air pump from operating:

- 1. Disconnect the 12-volt battery with the vehicle in the OFF mode.
- 2. Cover the intake air duct and the opening of the exhaust pipe.

NOTE: Refer to the *General Information* section of the BRM for more information.



PAINT BOOTH CONDITIONS

When the vehicle is in a heated paint booth, make sure not to exceed 140°F or the high-voltage battery may get damaged.