Information for First & Second Responders
Emergency Response Guide For Vehicle:

Li-ion

2017−21 Honda Clarity Fuel Cell Hybrid
4-Door Sedan Hybrid Electric Vehicle

CLARITY FUEL CELL

Version 1

This guide has been prepared to assist emergency response professionals in identifying a 2017−21 Honda Clarity Fuel Cell and safely respond to incidents involving this vehicle.

Copies of this guide and other emergency response guides are available for reference or downloading at https://techinfo.honda.com.

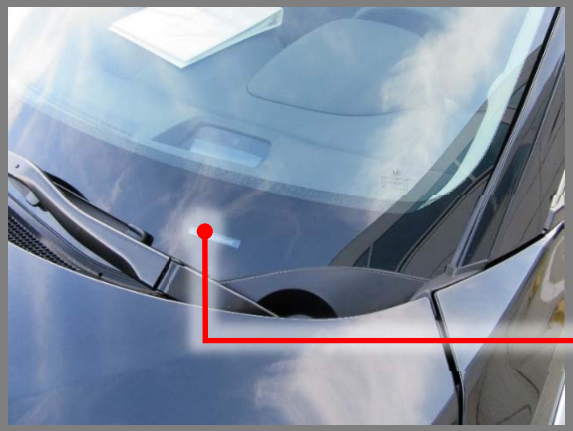
For questions, please contact your local Honda dealer or Honda Automobile Customer Service at **(800) 999-1009**.

Honda wishes to thank emergency response professionals for their concern and efforts in protecting Honda customers and the general public.

Contents

The Honda Clarity Fuel Cell can be identified by the **CLARITY** emblem mounted on the trunk and the **FUEL CELL** emblems mounted on the trunk and front fenders.

Under the hood, the Honda Clarity Fuel Cell can be identified by the **FUEL CELL** emblem on power control unit (PCU) and the orange cables in the engine compartment.



A Honda Clarity Fuel Cell can also be identified by inspecting the VIN at the three locations shown below.

The characters 4 thru 6 of the VIN will show **ZC4** indicating that it is a Honda Clarity Fuel Cell.

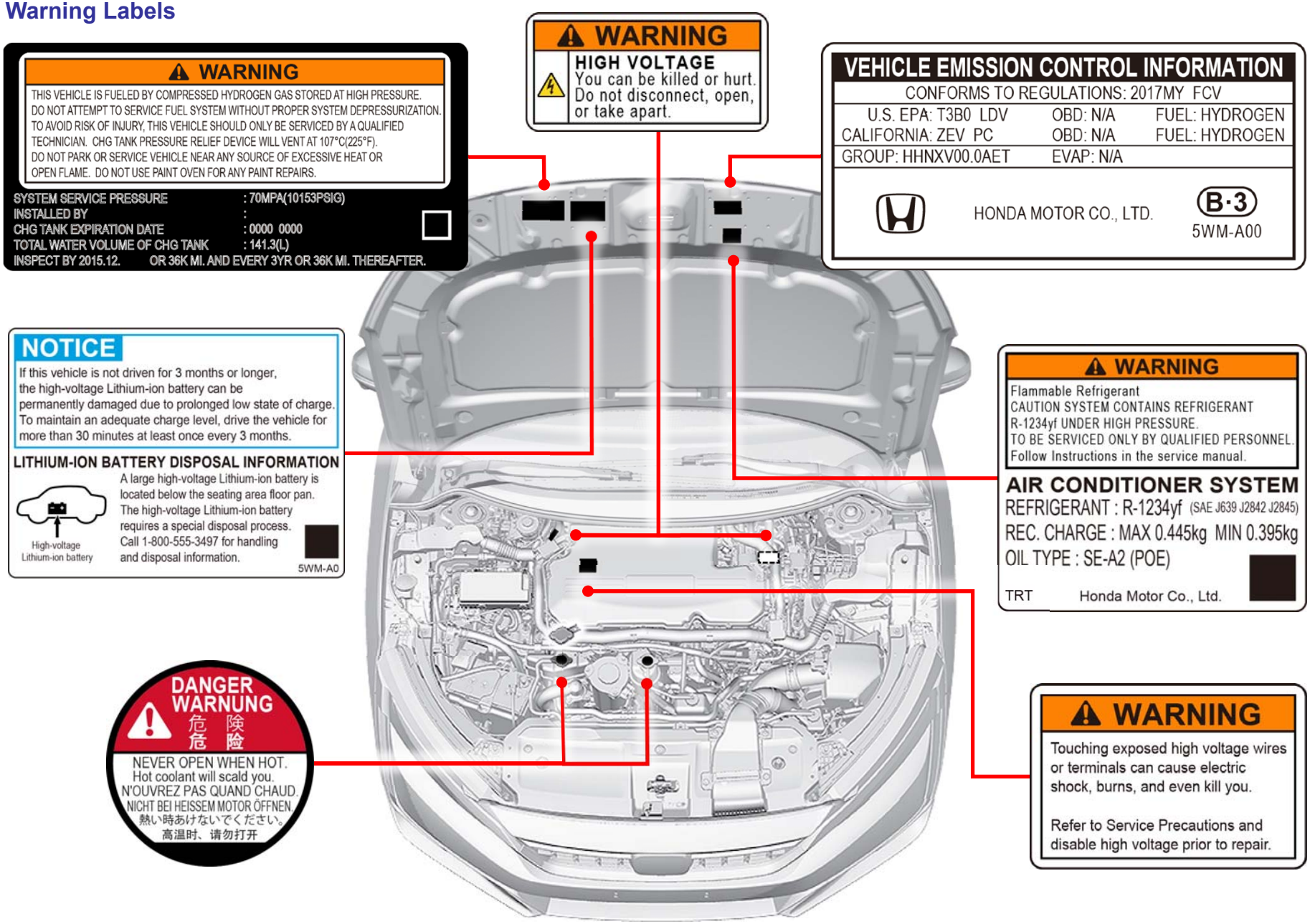
JHM**ZC4*******000001

VIN plate located on the lower-right corner of the front windshield

Stamped into the floor panel in front of the passenger seat under a plastic panel marked **FRAME NUMBER**

Printed on the VIN label on the driver's doorjamb

Warning Labels



Warning Labels (continued)

⚠ DANGER	⚠ PELIGRO	⚠ DANGER
HIGH VOLTAGE You will be killed or hurt. Before servicing	**ALTA TENSION** Peligro de accidente o muerte. Antes de manipular	**HAUTE TENSION** Danger de mort ou de blessures. Avant le service
■ Switch vehicle power mode to off and remove high-voltage battery service plug. ■ Wear insulated gloves and use insulated tools. ■ Check voltage at high-voltage battery box terminals. ■ Follow all service manual instructions.	■ Cambie el interruptor de encendido del vehículo a OFF y retire el conector de servicio de la batería de alta tensión. ■ Utilice guantes y herramientas aislantes. ■ Compruebe el voltaje en las terminales de la caja de la batería de alta tensión. ■ Siga todas las instrucciones del manual de servicio.	■ Mettre le mode d'alimentation du véhicule à OFF, puis retirer le capuchon de la prise de service de la batterie haute tension. ■ Porter des gants isolants et utiliser des outils isolés. ■ Vérifier la tension aux bornes du boîtier de la batterie haute tension. ■ Suivez toutes les instructions du manuel d'atelier.

5WP -A0

LITHIUM-ION BATTERY DISPOSAL INFORMATION

This high voltage battery requires a special handling and disposal process.
Contact for instructions,
in USA : Call 1-800-555-3497
in Canada : Call 1-888-946-6329

MISE AU REBUT DES BATTERIES LITHIUM-ION

La manutention et la mise au rebut de la batterie haute tension nécessitent un processus spécial.
Pour les directives, contactez :
aux É.-U. : 1-800-555-3497
au Canada : 1-888-946-6329

5WP-A0

⚠ DANGER	⚠ PELIGRO	⚠ DANGER
IMPACT Strong impact (i.e., dropping the battery, collision damage) may cause electrolyte leaks, internal short circuits and heat increase resulting in fire. Avoid impact to the battery.	**IMPACTO** Impacto fuerte(es decir, dejar caer la batería, el daño causado por la colisión) puede causar fuga de electrolitos, cortocircuitos internos y aumento de temperatura pudiendo provocar un incendio. Evite el impacto a la batería.	**CHOC** Choc important (c'est à dire : faire tomber la batterie, les dommages par collision) peut provoquer des fuites d'électrolyte, courts-circuits internes et l'élévation de la température qui peuvent entraîner un incendie. Éviter tout choc sur la batterie.
FLAMMABLE LIQUID and VAPOR Battery damage may cause flammable gas or electrolyte leaks and may result in fire. Do not damage the battery and keep sparks, flame and cigarettes away.	**LÍQUIDOS INFLAMABLES y VAPOR** Daño en la batería puede causar fuga de electrolitos o gas inflamable y puede provocar un incendio. No dañe la batería y manténgase lejos de chispas, fuego y cigarros.	**LIQUIDE et VAPEUR INFLAMMABLES** L'endommagement de la batterie peut provoquer des fuites de gaz ou d'électrolyte inflammables et peut entraîner un incendie. Ne pas endommager la batterie. Éloigner de toute étincelle, flamme nue ou cigarette allumée.
CHEMICAL HAZARD - CORROSIVE Organic electrolyte may cause severe burns to skin and eyes. Wear personal protective equipment.	**RIESGO QUÍMICO - CORROSIVO** El electrólito orgánico puede causar severas quemaduras en la piel y los ojos. Use equipo de protección personal.	**RISQUE CHIMIQUE - CORROSIF** L'électrolyte organique peut causer de graves brûlures à la peau et aux yeux. Porter un équipement de protection individuelle.
POISON Organic electrolyte is poisonous. If ingested, get medical attention immediately.	**VENENO** El electrólito orgánico es venenoso. En caso de ingestión, busque atención médica inmediatamente.	**POISON** L'électrolyte organique est toxique. En cas d'ingestion, consulter immédiatement un médecin.
KEEP OUT OF REACH OF CHILDREN	**MANTÉNGASE FUERA DEL ALCANCE DE LOS NIÑOS**	**GARDER HORS DE LA PORTÉE DES ENFANTS**


SHIELD EYES
PROTEJA LOS OJOS
PROTÉGEZ LES YEUX


NO FIRE
NO FUEGO
AUCUNE SOURCE DE FEU


CORROSIVE ORGANIC ELECTROLYTE
ELECTROLITO ORGÁNICO CORROSIVO
ÉLECTROLYTE ORGANIQUE CORROSIF


GET MEDICAL HELP FAST
OBTENGA AYUDA MÉDICA RÁPIDA
OBTENIR RAPIDEMENT DE L'AIDE MÉDICALE

Li-ion

5WP-A0

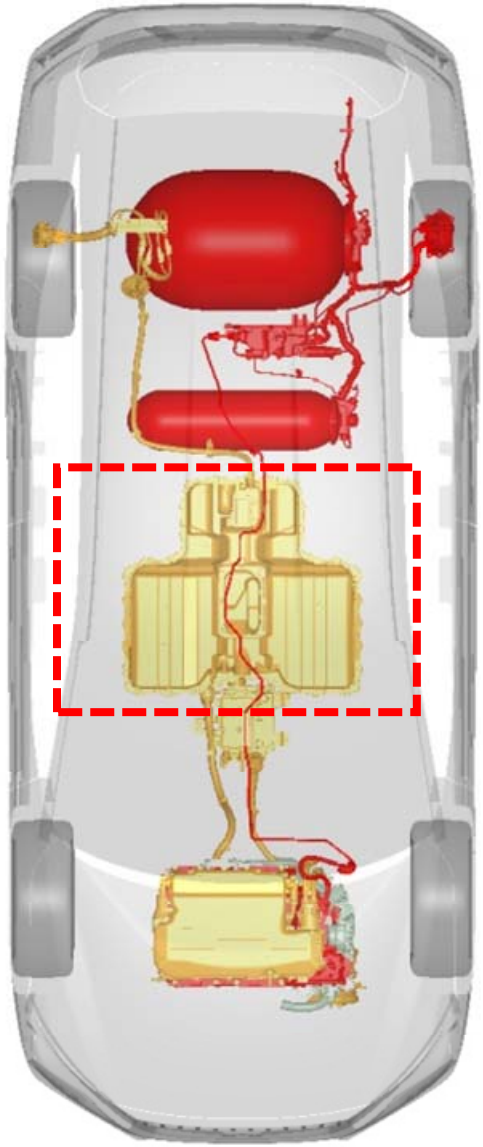
⚠ WARNING

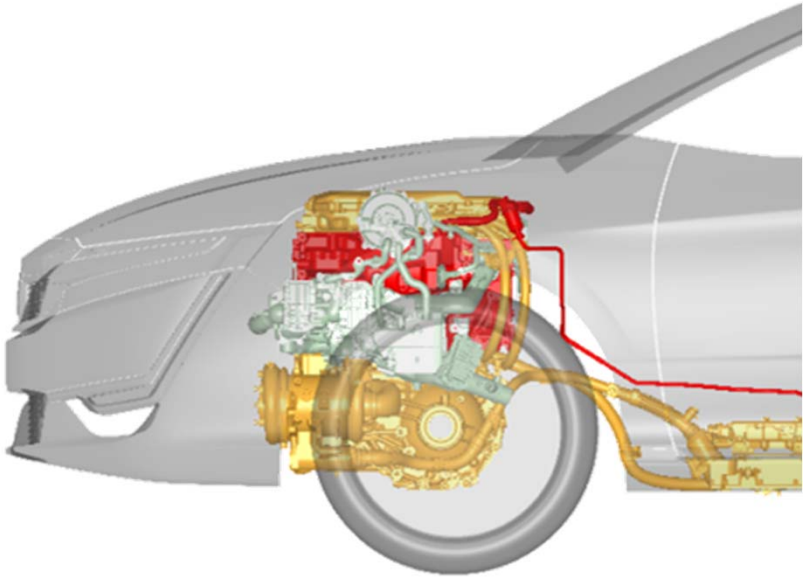
HIGH VOLTAGE
You can be killed or hurt.
Do not disconnect, open, or take apart.

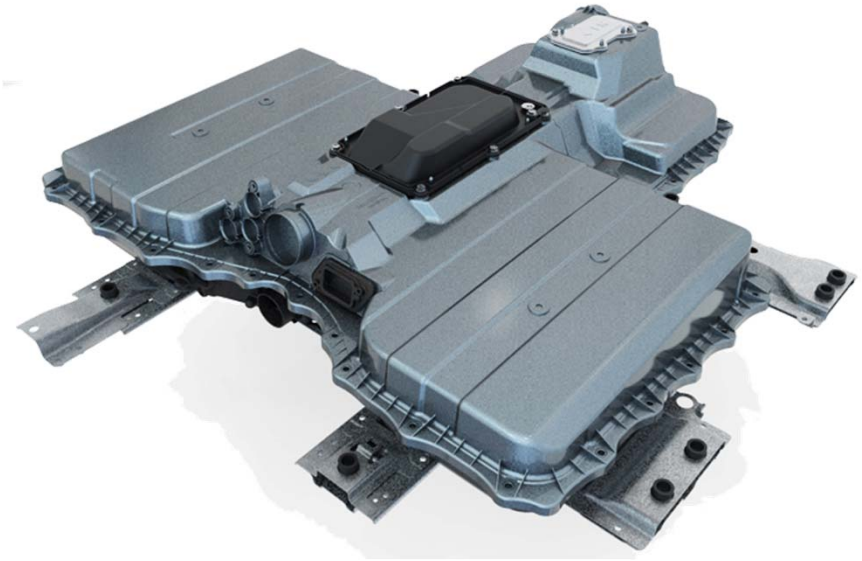
A0

High-Voltage Battery - Location

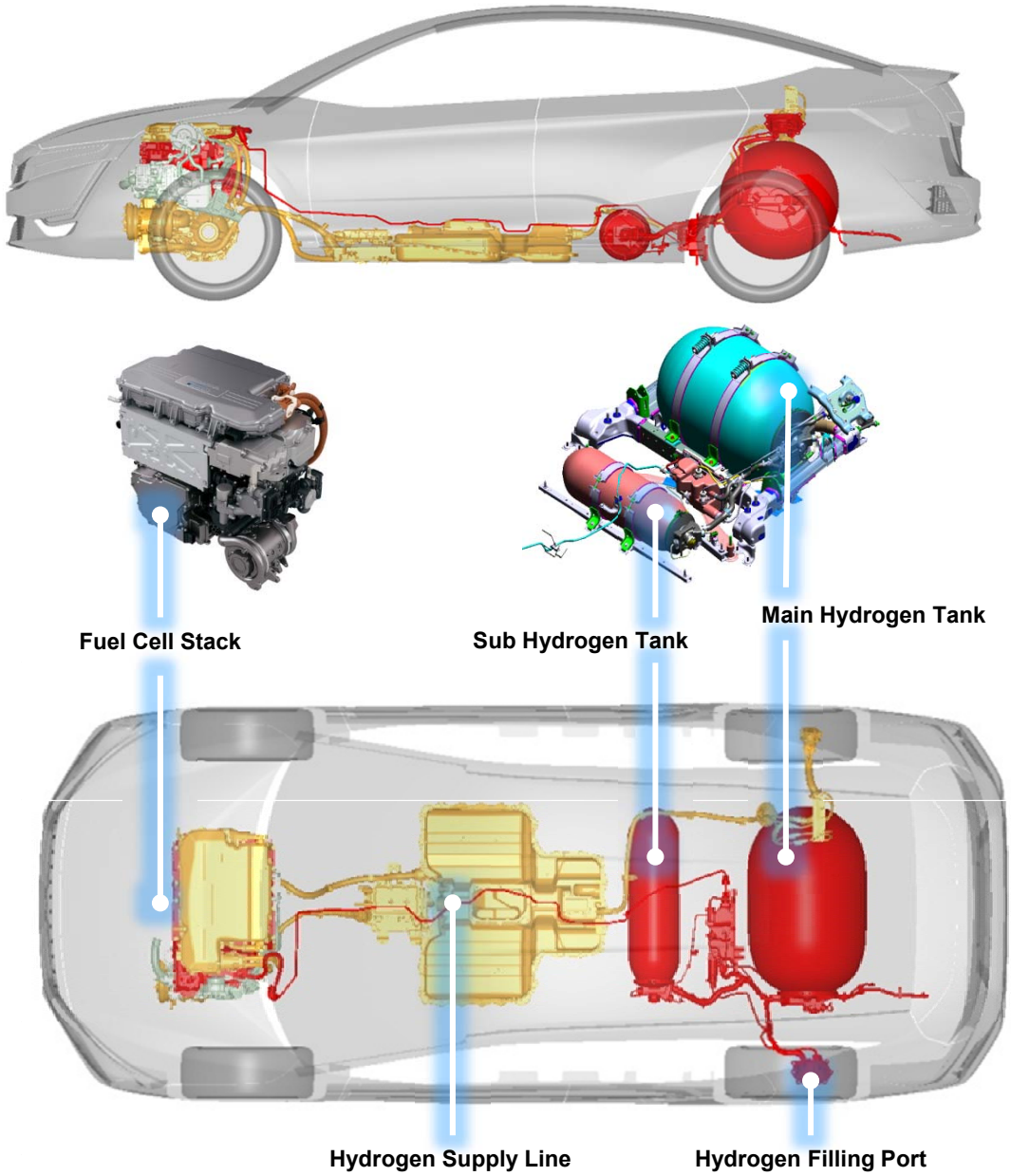
The high-voltage battery is located under the cabin floor in the center of the vehicle.







Hydrogen Supply Components



How to Determine if Vehicle is in ON / OFF Mode.

Check the green indicator on the POWER button and the gauges for the vehicle status.

Vehicle is OFF

The power to all electrical components is turned off.

- The POWER button and the green indicator are OFF.
- Pressing the POWER button once will change to the Accessory mode.

OFF

Vehicle is in Accessory

You can operate the audio system and other accessories in this position.

- The POWER button is blinking.
- Press the POWER button twice to turn off the vehicle.
- Pressing the POWER button once will change to the ON mode.

BLINK

Vehicle is ON

The Engine is **OFF** but all electrical components can be used.

- The POWER button is ON.
- Press the POWER button once to turn off the vehicle.
- While pressing the brake pedal, pressing the POWER button once will change to the Ready to Drive mode.

ON

Vehicle is Ready to Drive

Ready To Drive is shown on the Multi-Information Display (MID).

- The POWER button is ON.
- The **READY** indicator is ON.
- The **EV** indicator is ON.

- Press the POWER button once to turn OFF the vehicle.

ON

Parking the Vehicle

NOTE:
- **The following features will only operate if the vehicle's 12-volt battery power is available.**
- **If the 12-volt power IS NOT available, use available wheel chocks.**

1. Press the POWER button twice to turn the vehicle ON.
2. Press the P on the Electronic Gear Selector to shift the transmission to Park.
3. Push the POWER button to turn the vehicle OFF.
4. If necessary, pull up the Electric Parking Brake switch to apply the parking brake.

Applying the Electric Parking Brake
The electric parking brake can be applied any time the vehicle has battery power no matter what state the power mode is in.

Pull up the Electric Parking Brake switch gently and securely.

The parking brake and Brake System indicator come on.

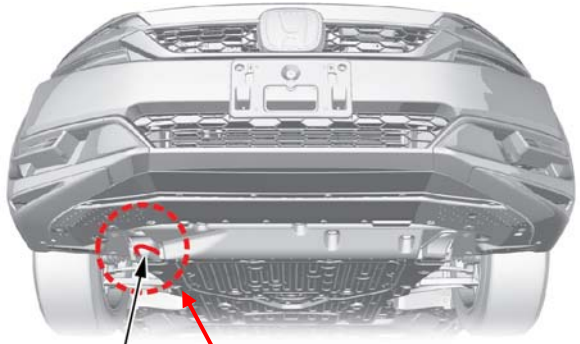
Releasing the Electric Parking Brake
The power mode must be turned to ON to release the electric parking brake.
1. Press and hold the brake pedal.
2. Press the Electric Parking Brake switch.

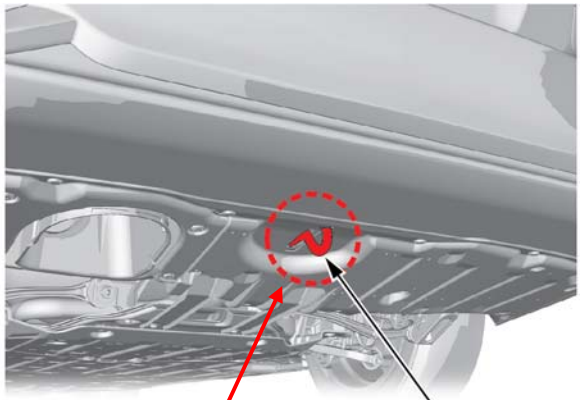
The parking brake and Brake System indicator go off.

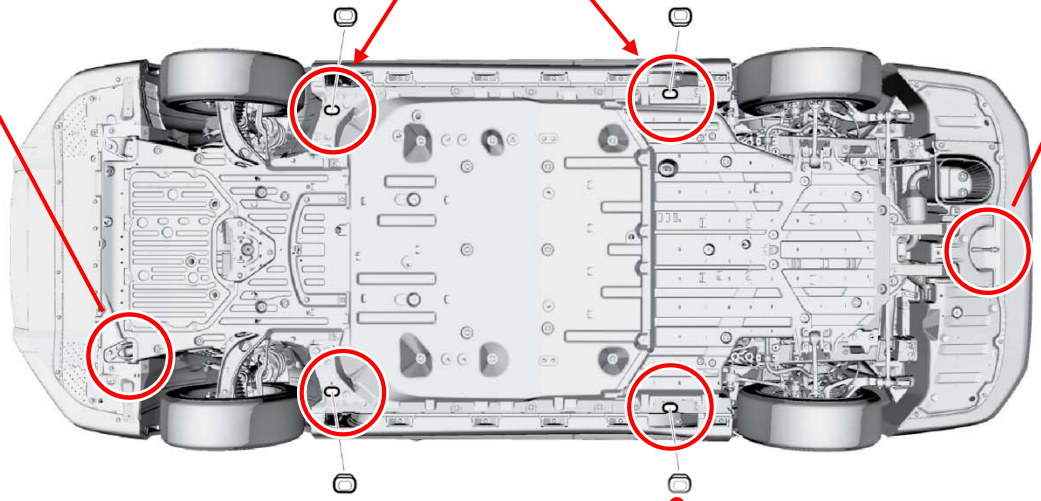
Securing the Vehicle

The recommended tie-down locations for securing the vehicle are indicated below.

- Four tie-down slots (covered by rubber plugs) - Two behind the front wheels and two in front of the rear wheels
- Front tow hook - In front of the right-front tire
- Rear tow hook – Under the center of the rear bumper







NOTE: Install the rubber plugs after use.

Preventing Current Flow Through High-Voltage Cables

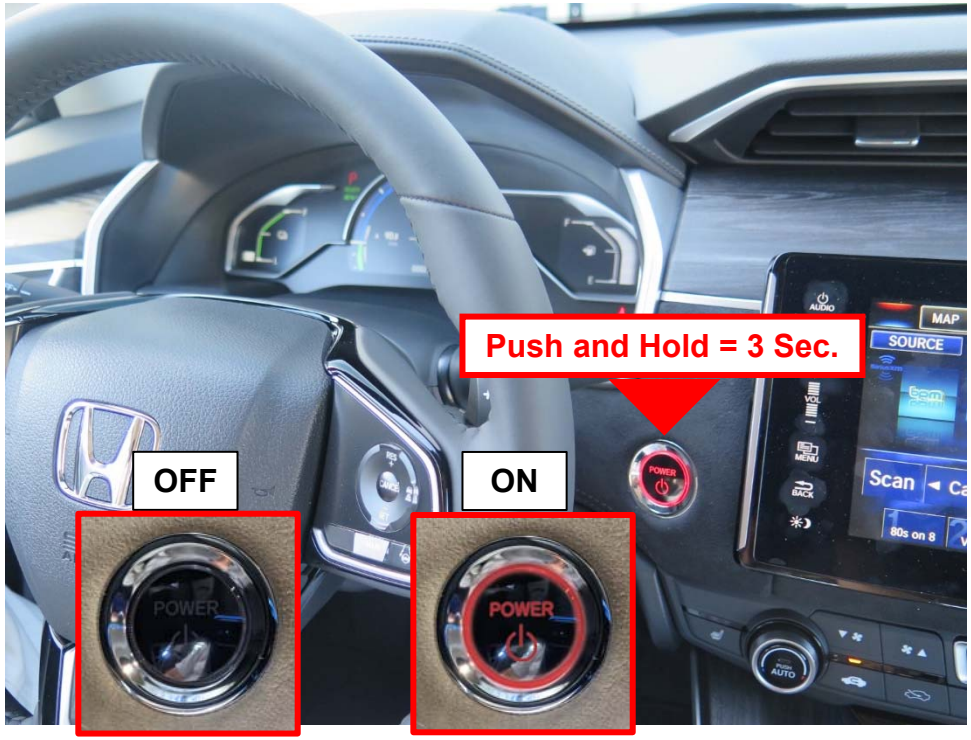
Before attempting to rescue occupants or move a damaged Honda Clarity Fuel Cell, you should reduce the potential for current to flow from the electric motor or the high-voltage battery through the high-voltage cables.

There are ***two recommended methods*** for preventing current flow. These are discussed on the following pages.

PREFFERED METHOD for High-Voltage Shutdown

Push and hold the POWER button for 3 seconds.

This simple action turns off the vehicle and immediately shuts down the high-voltage system controllers, thereby preventing current flow into the cables. It also cuts power to the airbags and the front seat belt tensioners, though these pyrotechnic devices have up to a **3-minute** deactivation time.



To prevent accidental restarting, you must remove the keyless remote from the vehicle and move it at least **20 feet** away.

If you cannot locate the keyless remote, disconnect the negative terminal from the 12V battery to prevent electrical fires and accidental restarting of the vehicle.

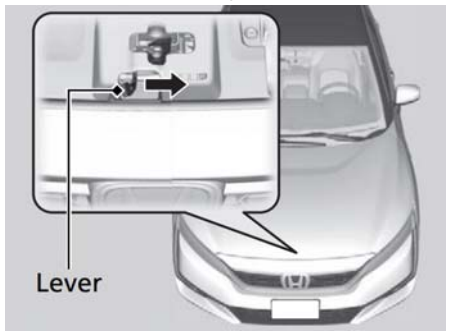
ALTERNATIVE BEST METHOD for High-Voltage Shutdown

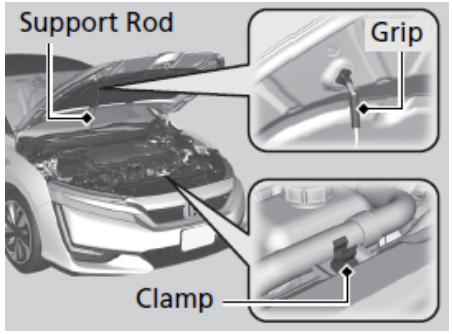
Locate and cut the negative 12-volt battery cable and the power control unit (PCU) cable in the engine compartment.

Together, cutting the negative 12-volt battery cable and the PCU cable immediately turns off and shuts down the high-voltage system controllers and the engine, thereby preventing current flow to the high-voltage cables.

1. Pull the hood release handle under the driver's side lower corner of the dashboard. The hood will pop up slightly.

2. Push the hood latch lever (located under the front edge of the hood to the center) to the side, and raise the hood.





Continued on the next page.

If you need to cut the hood to open it, be sure to stay within the cut zone as shown

ALTERNATIVE BEST METHOD for High-Voltage Shutdown (continued)

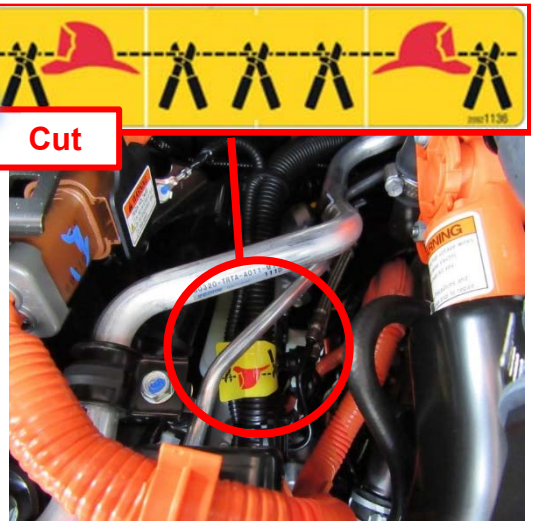
3. Locate the two cut point labels as shown, and cut them.

If touching high-voltage cables and other high-voltage components is unavoidable, personal protective equipment (insulating gloves, goggles, and boots) should always be worn.

This also cuts power to the airbags and the front seat belt tensioners, though these pyrotechnic devices have up to a **3-minute** deactivation time.

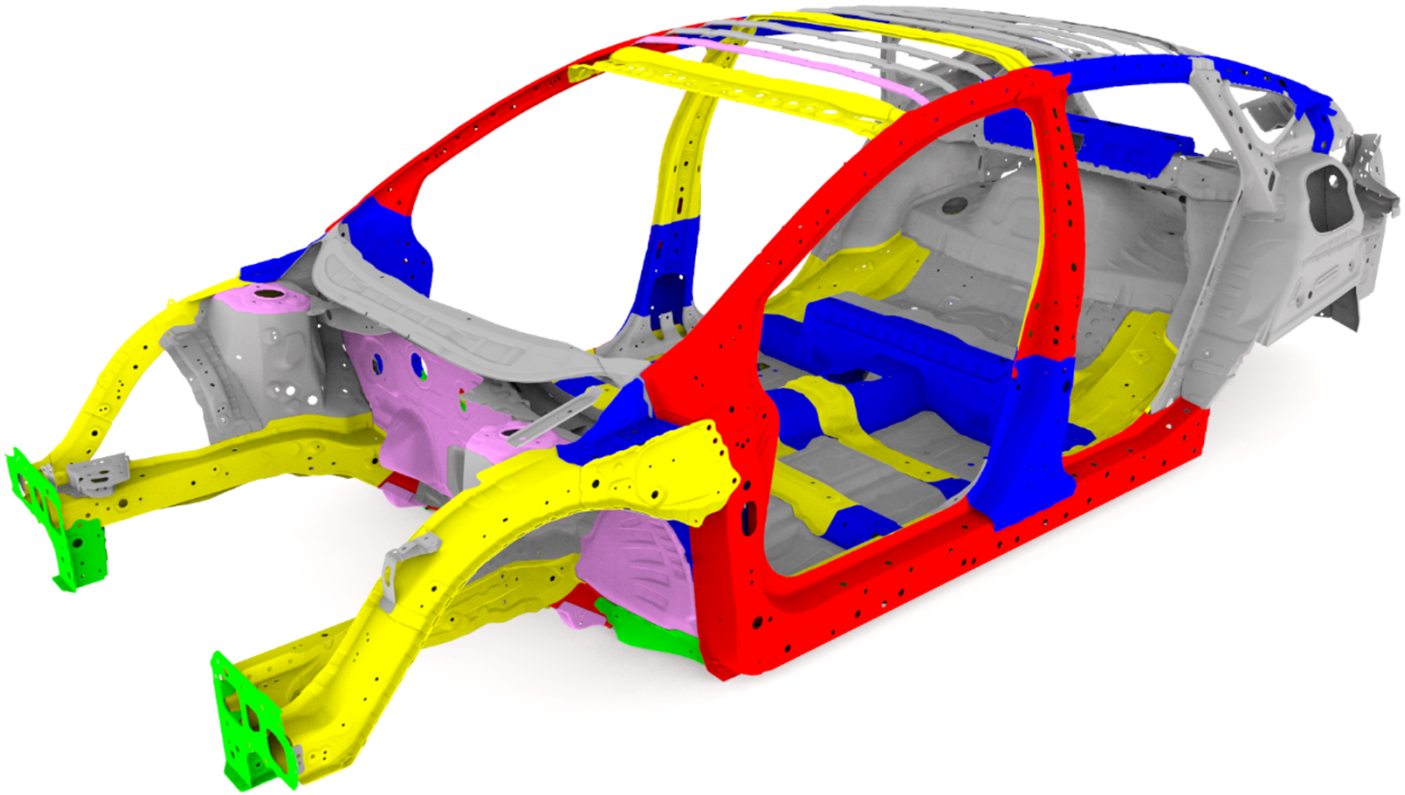
NOTE:
When cutting the cables, do not allow the cutting tool to contact any surrounding metal parts; electrical arcing could occur, which can ignite any flammable vapors.

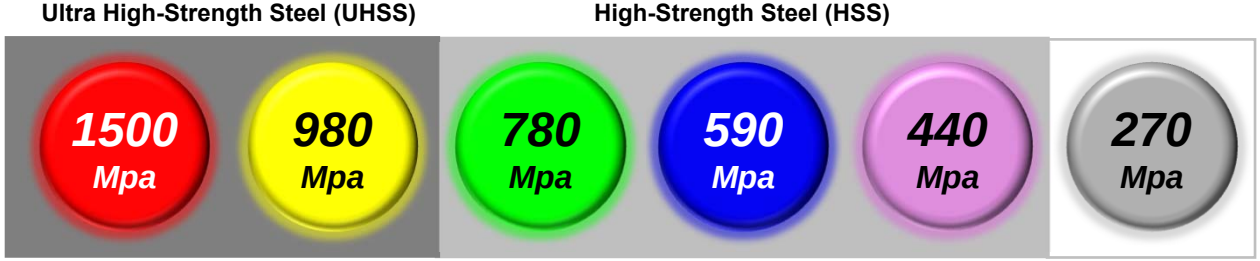
If you cannot do either method to stop the engine and prevent current flow into the high-voltage cables, use extreme care and do not touch damaged cables as they may be electrically charged.



High-Strength and Ultra-High-Strength Steel

The body of the Honda Clarity Fuel Cell is made of high-strength steel and ultra-high-strength steel indicated in the colored areas.





High-Strength and Ultra-High-Strength Steel

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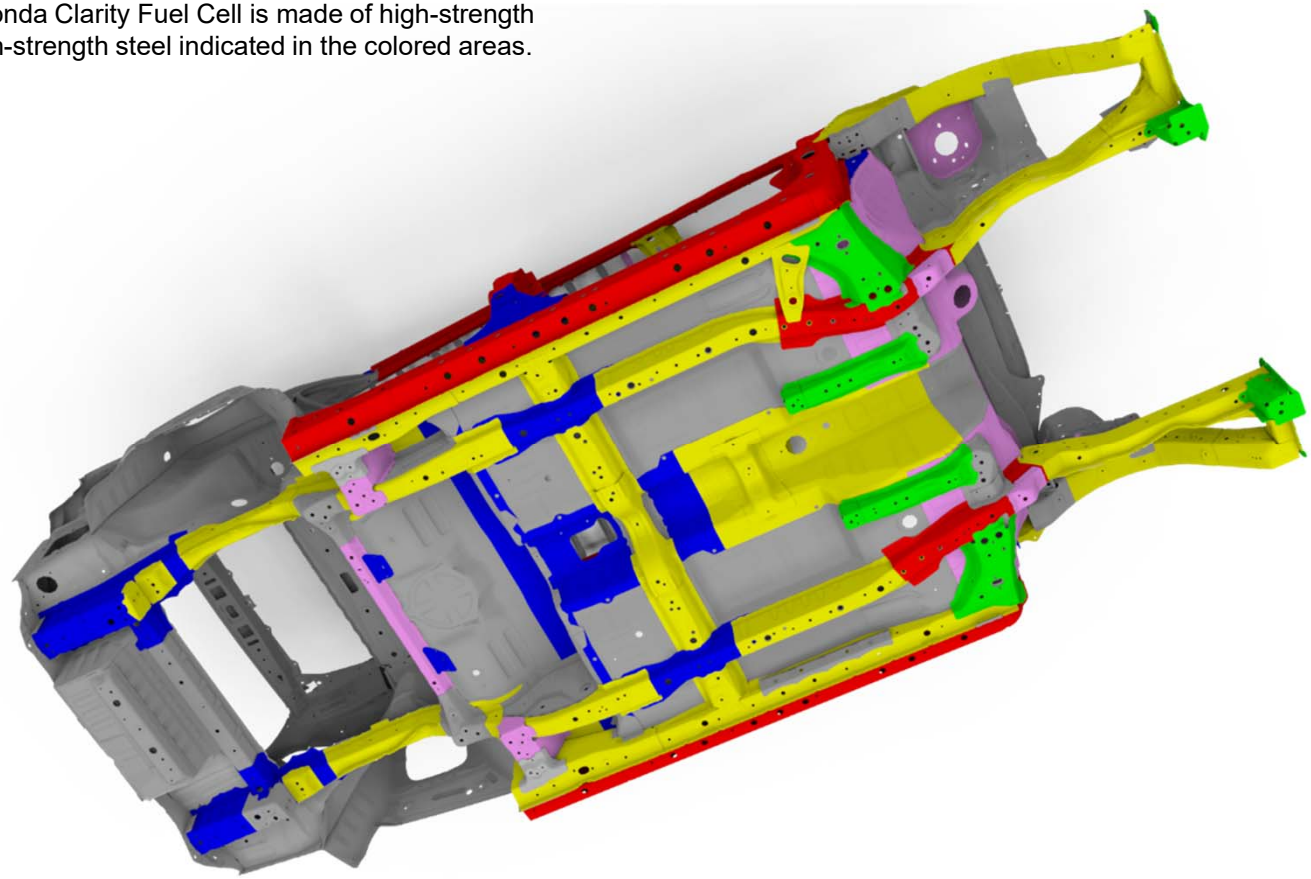
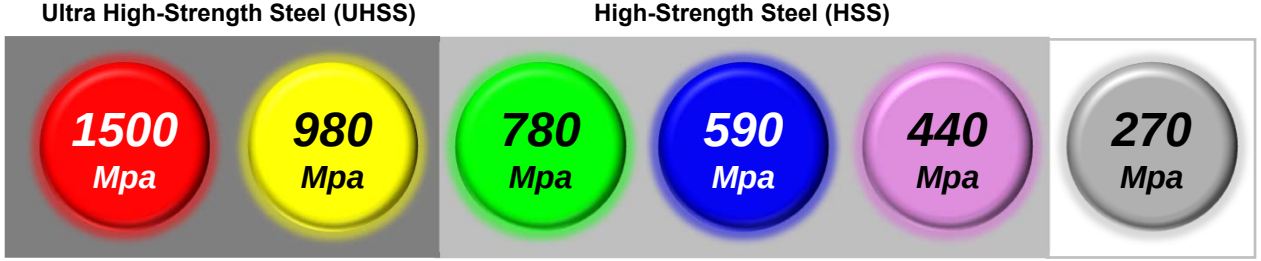
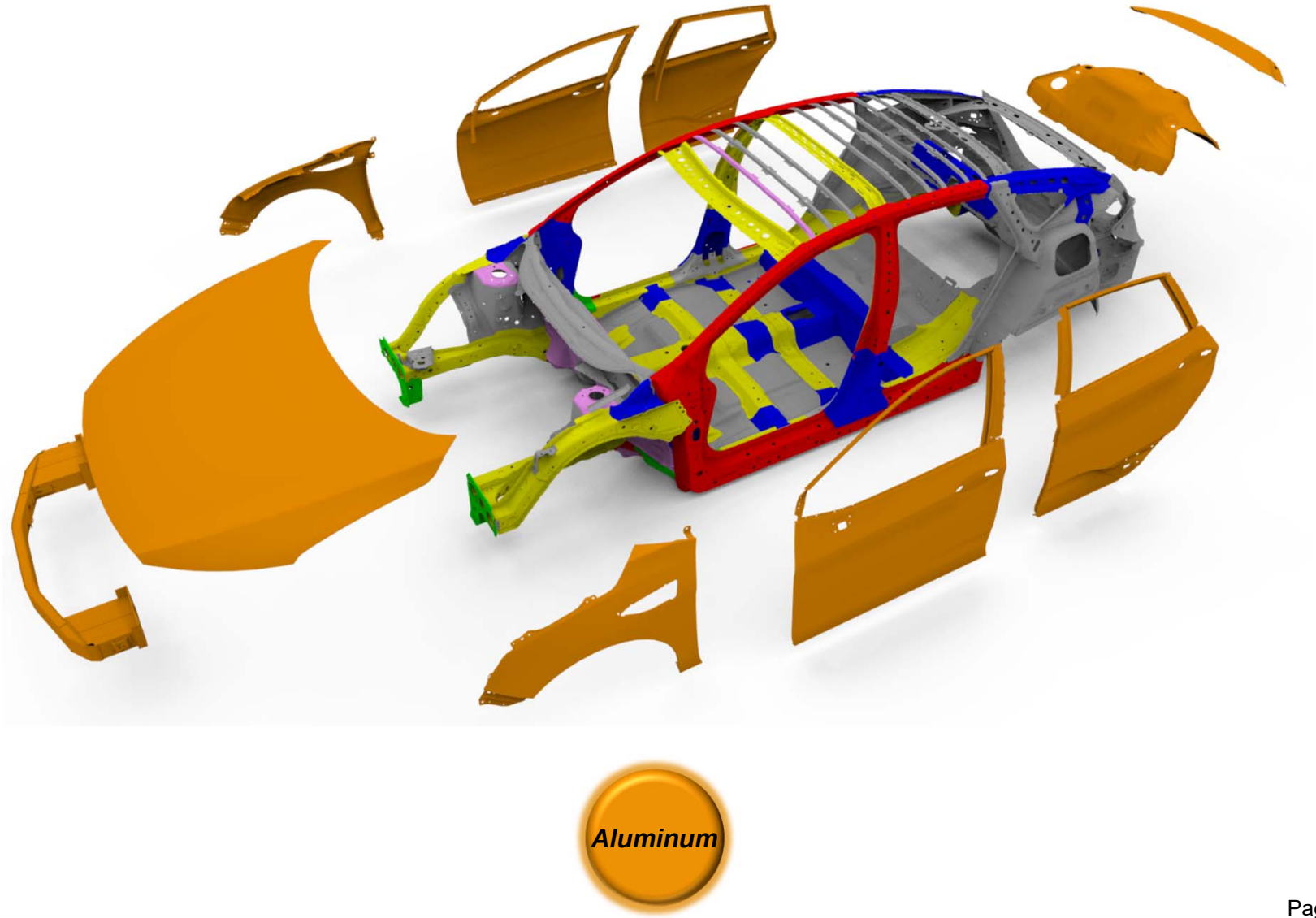


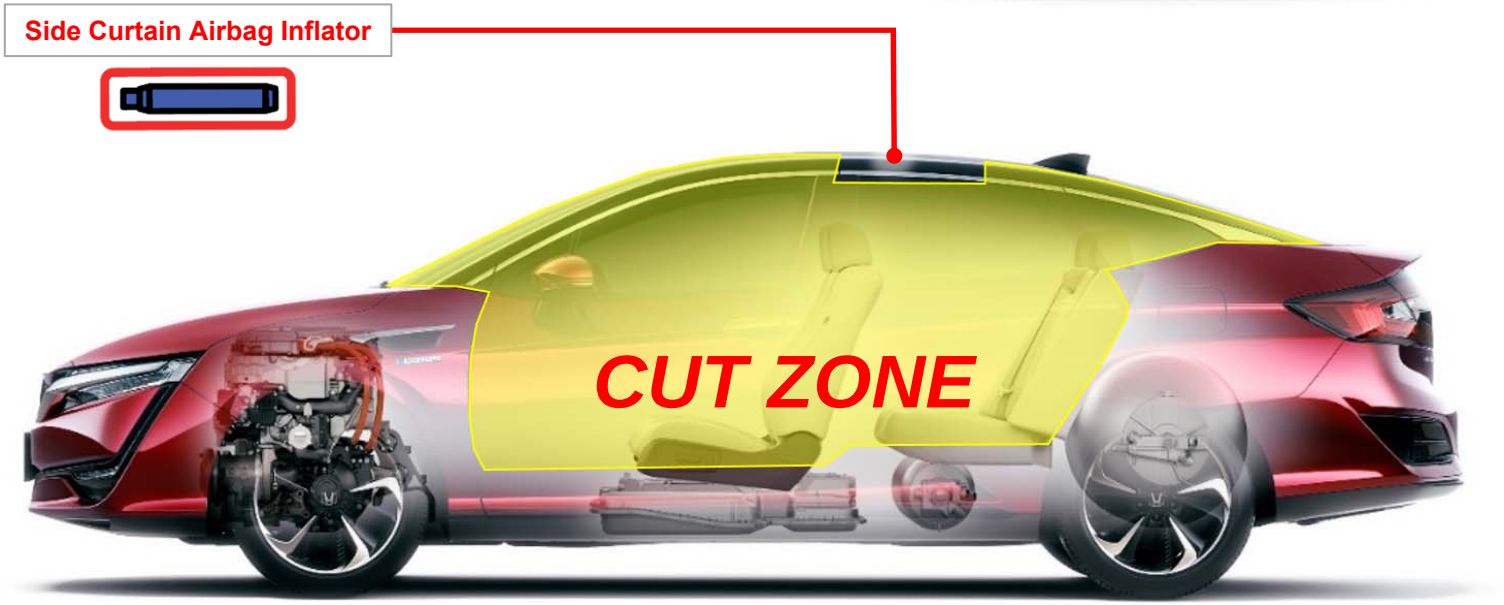


Aluminum Body Parts

The indicated body parts are constructed from aluminum alloy.

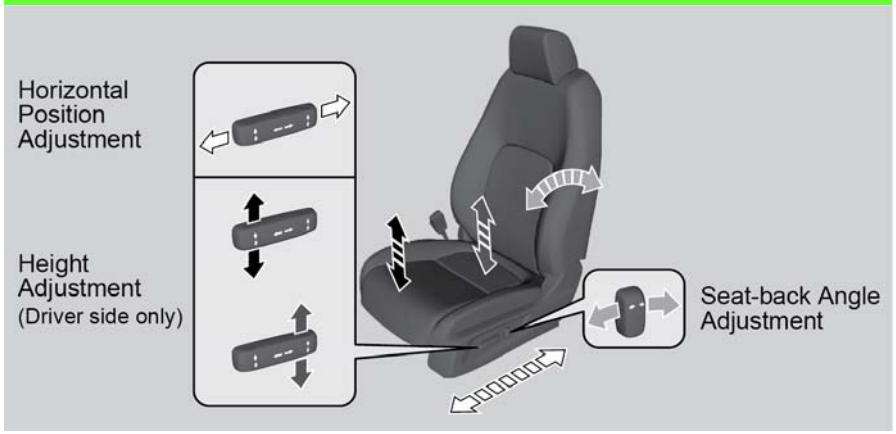


If you need to cut the vehicle body or use Jaws-of-Life equipment to remove occupants, be sure to stay within the cut zone as shown.

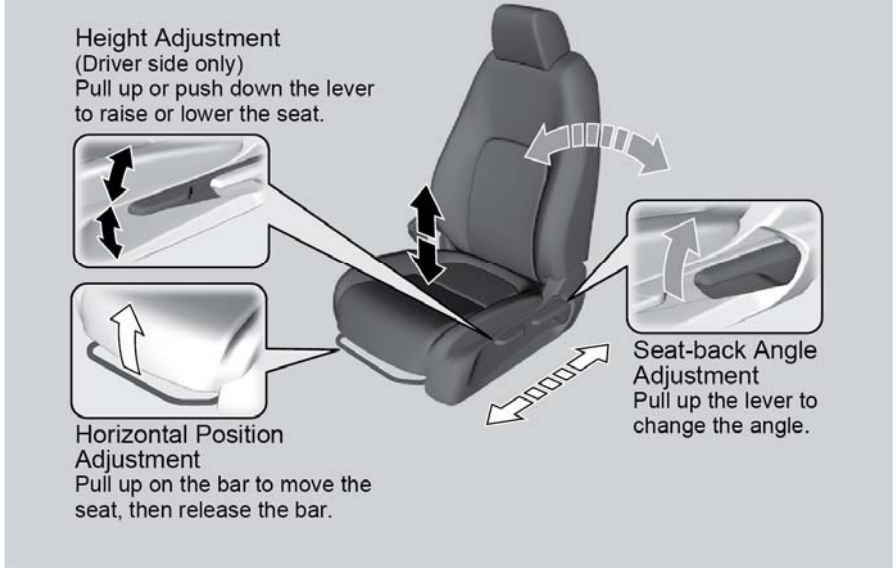


Moving the Seats, Head Restraints & Steering Wheel

With Power Seats

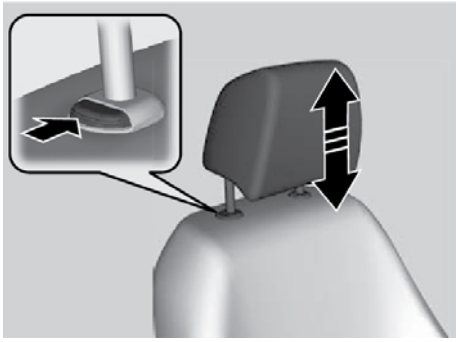


With Manual Seats



To raise the head restraint: Pull upward.

To lower the head restraint: Push down while pressing the release button.

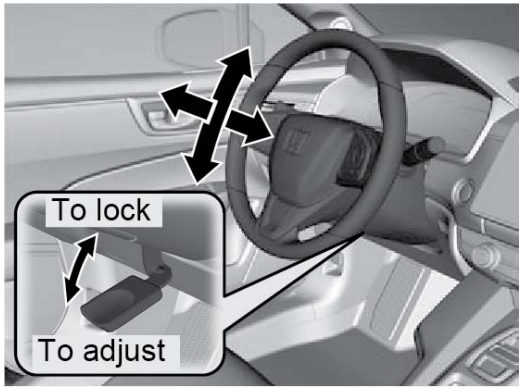


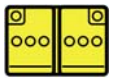
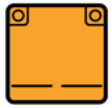
To adjust the steering wheel position:

1. **Push forward on the steering wheel adjustment lever.**
   The steering wheel adjustment lever is under the steering column.

2. **Move the steering wheel up or down, and in or out.**

3. **Pull back on the steering wheel adjustment lever to lock the steering wheel in position.**



Type	Capacity	Content	Dangers
12-Volt Battery 	12 V—36 Ah/5 HR (12 V—45 Ah/20 HR)	• **Sulfuric acid** 34% • **Lead** 34% • **Lead peroxide** 31% • **Lead sulfate** 1%	
Lithium-Ion, High-Voltage Battery 	346 V 96 cells (3.6 V) (18 cells × 4 modules, 12 cells x 2 modules)	• **Lithium metal oxide** 10-20% • **Carbonic acid esters** 10-20% • **Carbon** 5-15% • **Lithium salt** 1-5% • **Polyvinylidene flouride** 0.5-3%	
Hydrogen gas	Gas: 37.3 US gal (141.3 L)	• Hydrogen 100%	
Fuel Cell Insulating Fluid	4.75 US gal (18.0 L)	• **Water** 45-55% • **Ethylene glycol** 43-49 % • **Hydrated inorganic acid, organic acid salts** less than 5% • **Diethylene glycol** less than 3%	
Drivetrain (DT) Coolant	2.09 US gal (7.9 L)		
Transmission Fluid	2.01 US qt (1.9 L)	• **Lubricating base stocks** 80-90% • **N-Phenyl-1-napthylamine** less than 1%	

Type	Capacity	Content	Dangers
Brake Fluid	N/A	• **Mixture of glycol ether, glycol derivative, glycol ether borate ester (except diethylene glycol)** 89-99 % • **Diethylene glycol** less than 10%	Not provided on SDS
Air Conditioning Refrigerant 	13.93 – 15.7 oz (395 – 445 g)	• **Tetrafluoroprop-1-ene** (R-1234yf) 100%	
Windshield Washer Fluid	1.43 US qt (1.35 L)	**Concentrate:** • **Methyl Alcohol (methanol)** more than 99% **Tablet:** • **Sodium carbonate** (2:1) 40 to 55% • **Citric acid** 20 to 40% • **Ethoxylated fatty alcohols** 0.1 to 3% • **Alkoxylated alcohols** 0.1 to 2%	

Fire Extinguishing Methods

If a Honda Clarity Fuel Cell is involved in a high-voltage battery fire, the fire should be extinguished using the following procedure where possible but with this reminder:

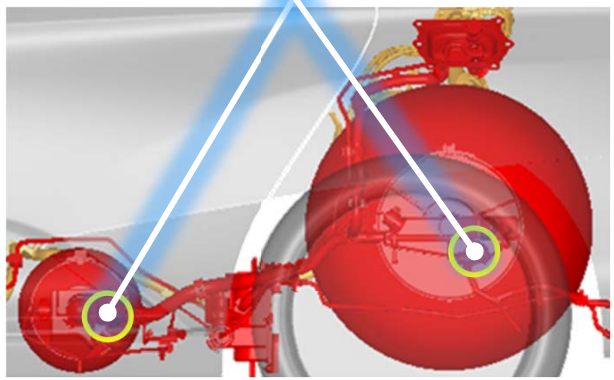
Keep away from the rear of the vehicle until the fire is completely out. Each hydrogen tank is equipped with a thermally-activated pressure relief device (TPRD). After sufficient exposure of the TPRD to temperatures above approximately **226°F (108°C)**, the hydrogen gas in the tanks will be released in the direction shown below. You may hear a hissing or roaring as the hydrogen escapes, and it can take up to **5 minutes** for a full tank to empty. Although pure hydrogen flames are invisible, you will see colored flames if other parts of the vehicle are burning.

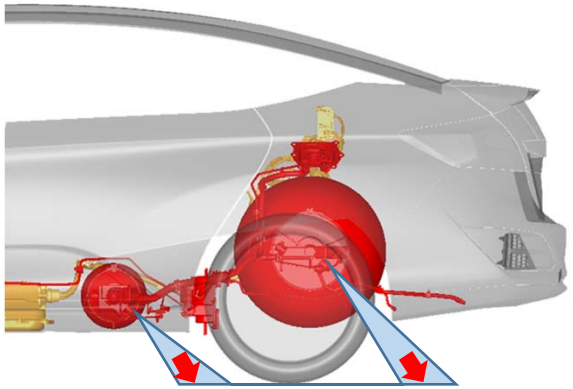
If touching high-voltage cables and other high-voltage components is unavoidable, personal protective equipment (insulating gloves, goggles, and boots) should always be worn.

1. Extinguish the remaining fire using a large volume of water such as from a fire hydrant, well water, or pond water. If water is not available, ABC powder fire extinguisher may be used as an alternative.

2. Apply water aiming **underneath** the vehicle floor from the front seat position to the rear tire position where the battery unit is located.

Thermally-activated Pressure Relief Device (TPRD)





Hydrogen Release Direction

See Section 8 (Towing/Transportation/Storage) for additional procedures including discharging the high voltage battery.

Continued on the next page.

Fire Extinguishing Methods (continued)

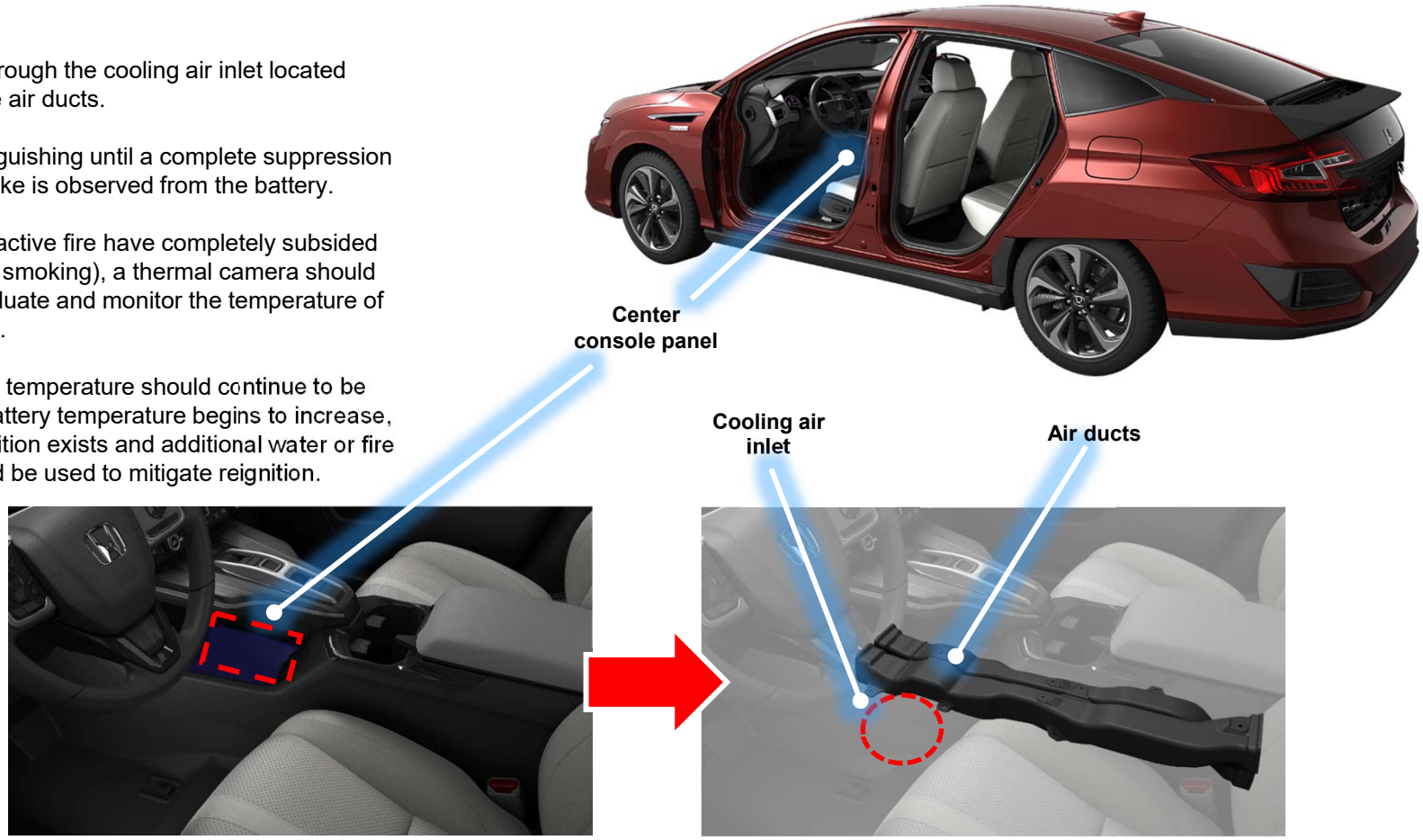
3. If it is safe to do so, remove the center console panel and air ducts.

4. Direct water through the cooling air inlet located underneath the air ducts.

5. Continue extinguishing until a complete suppression of fire and smoke is observed from the battery.

6. Once signs of active fire have completely subsided (e.g. no visible smoking), a thermal camera should be used to evaluate and monitor the temperature of the battery unit.

NOTE: The battery temperature should continue to be monitored. If the battery temperature begins to increase, possibility for reignition exists and additional water or fire extinguisher should be used to mitigate reignition.



See Section 8 (Towing/Transportation/Storage) for additional procedures including discharging the high voltage battery.

Submerged Vehicle

If a Honda Clarity Fuel Cell is submerged or partly submerged in water, first pull the vehicle out of the water, then shut down the high-voltage system.
See Section 3 (Disable Direct Hazards / Safety Regulations) for the high-voltage shutdown procedures.

If touching high-voltage cables and other high-voltage components is unavoidable, personal protective equipment (insulating gloves, goggles, and boots) should always be worn.

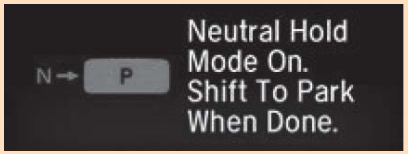
Aside from severe damage to the vehicle, there is no risk of an electric shock from touching the vehicle's body or framework—in or out of the water. If the high-voltage battery was submerged, you may hear noises from the battery as the cells are being discharged from shorting.

See Section 8 (Towing/Transportation/Storage) for additional procedures including discharging the high voltage battery.

Shifting the Vehicle into Neutral

NOTE:
- **The following features will only operate if the vehicle's 12-volt battery power is available.**
- **If the 12-volt power IS NOT available, use available wheel chocks or dollies.**
- **See Section 2 (Immobilization/Stabilization/Lifting) for additional procedures including parking the vehicle.**

1. Press the POWER button twice to turn the vehicle ON.
2. Press and hold the brake pedal.
3. Press the N on the Electronic Gear Selector to shift the transmission to Neutral. The message, Neutral Hold will appear on the MID.
4. Press N again, and hold it for **2 seconds**. The vehicle will enter neutral hold mode.



- For **15 minutes**, the transmission remains in neutral and the power mode will remain in ACCESSORY. After that, the transmission automatically shifts to park.

- If the POWER button is pressed after the neutral hold has been activated, the power mode will switch to ACCESSORY and a message will be displayed on the gauge.

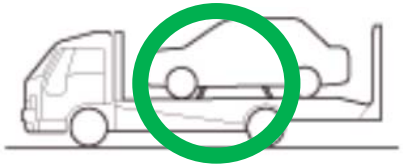
5. If necessary, press the Electronic Parking Brake button to release the parking brake.
6. Release the brake pedal and push the POWER button to turn the vehicle to ACCESSORY.

NOTE: Manually shifting to park cancels ACCESSORY mode. The P indicator comes on, and the power mode changes to OFF. Always shift the transmission to park when neutral hold is no longer necessary.

Emergency Towing

The only method for emergency towing is to use a flat-bed tow truck. **DO NOT** use cable type or front wheel type lift equipment.

NOTE: If there is a 12-volt power failure, the vehicle cannot be shifted into neutral. Use available wheel dollies.

Flat-Bed	Front Wheel Type	Cable-type
		
1. Secure the vehicle on the flat-bed tow truck. **2. Apply the parking brake.**	**Never tow this vehicle with front wheel type equipment.**	**Never tow this vehicle with cable-type equipment.**

Be aware that when rolling a Honda Clarity Fuel Cell with the front (drive) wheels on the ground, the electric motor can produce electricity and remains a potential source of electric shock even when the high-voltage system is turned off.

Carry a fire extinguisher during transportation and for enhanced safety, have the flat-bed tow truck with the damaged vehicle followed by another support vehicle for monitoring. After transportation, discharge the battery if necessary. See Battery Discharging in this section.

⚠WARNING

If the orange high-voltage cables or high-voltage covers have been damaged, exposing wiring, terminals, or other components, the exposed parts should never be touched. Doing so could result in serious injury or death due to severe burns or electric shock.

If it is not clear whether the exposed wires and terminals are high-voltage components or not, do not touch them.

If touching high-voltage cables and other high-voltage components is unavoidable, personal insulating protective equipment (insulating gloves, protective goggles, and insulating boots) should always be worn.

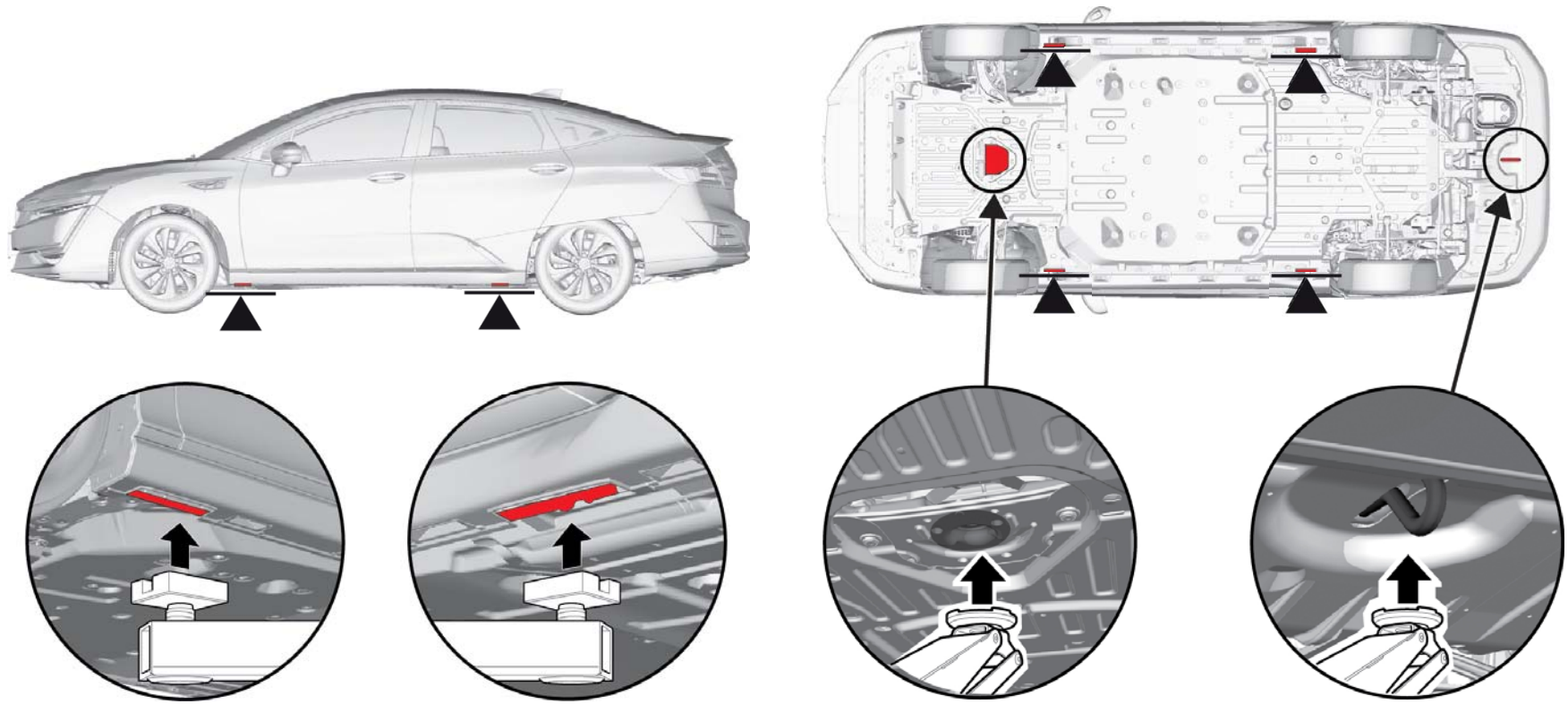
Acoustic Vehicle Alerting System

The Honda Clarity Fuel Cell is equipped with an acoustic vehicle alerting system that alerts pedestrians with an audible sound that it is approaching at low speeds or when stationary and in a gear position that would allow the vehicle to move. When pushing the Honda Clarity Fuel Cell with the ignition turned to ON, you will hear this sound as the vehicle is being moved.

Lifting the Vehicle

Use the indicated lifting points to raise the vehicle.

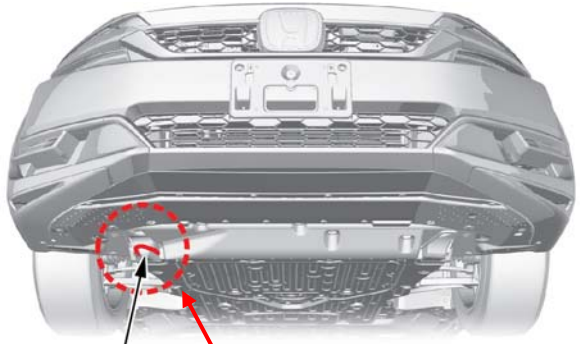
Recommended Lifting Points

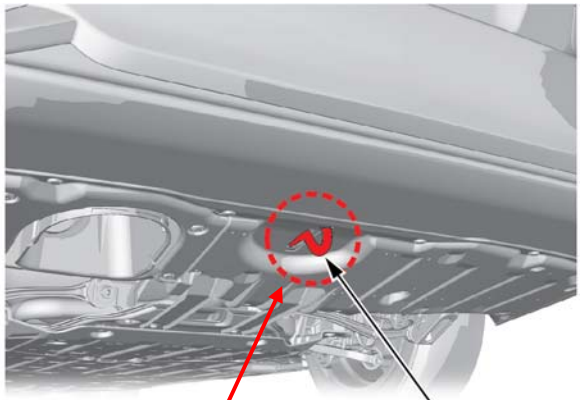


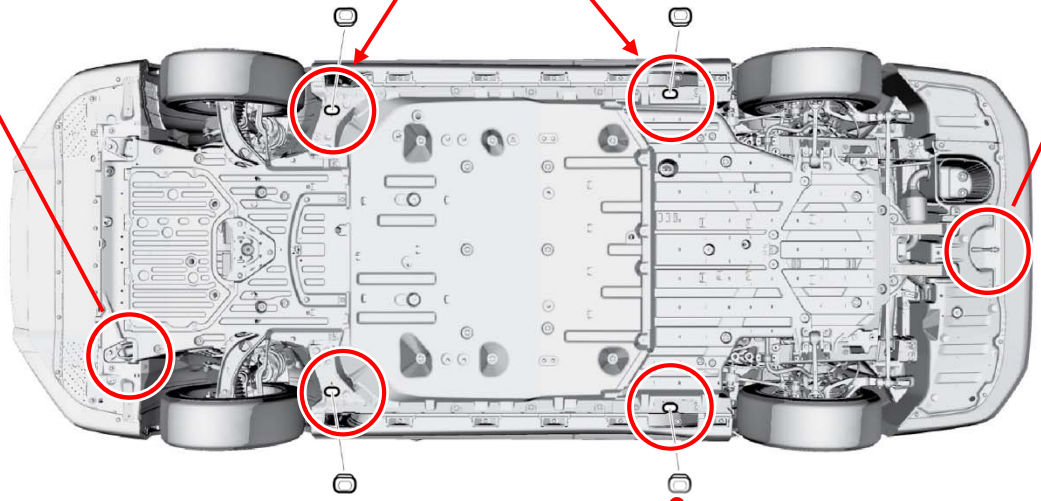
Securing the Vehicle

The recommended tie-down locations for securing the vehicle are indicated below.

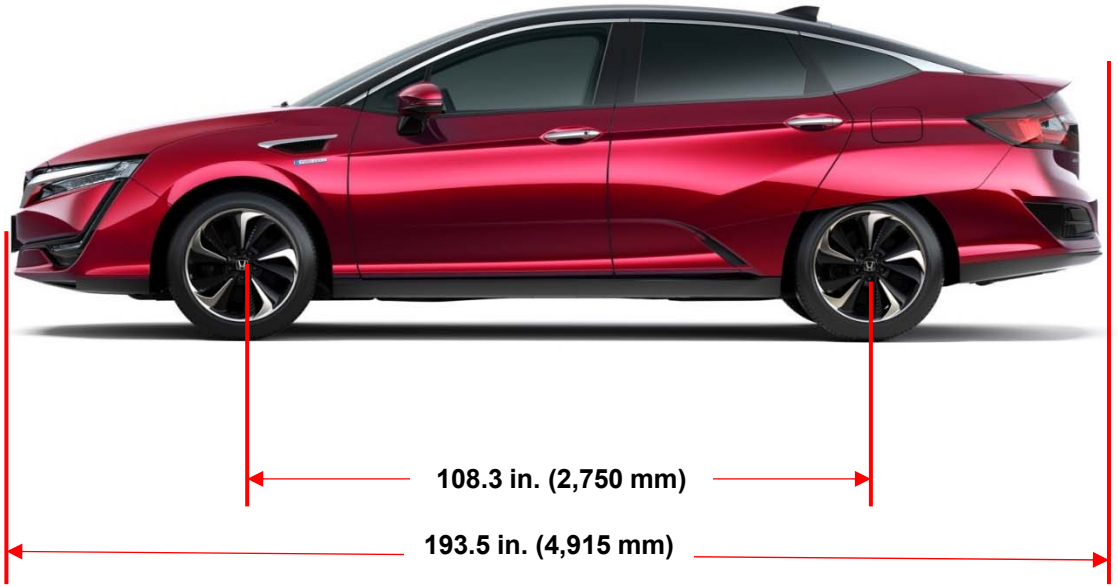
- Four tie-down slots (covered by rubber plugs) - Two behind the front wheels and two in front of the rear wheels
- Front tow hook - In front of the right-front tire
- Rear tow hook – Under the center of the rear bumper

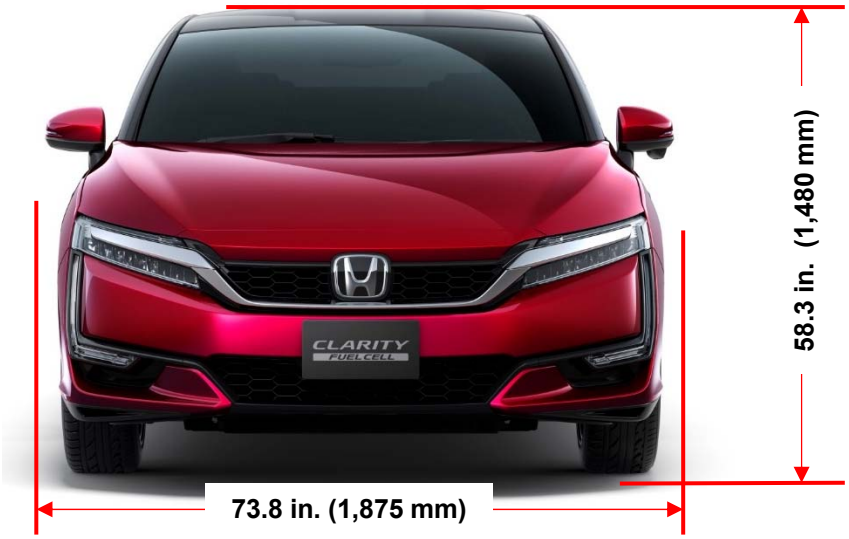






NOTE: Install the rubber plugs after use.





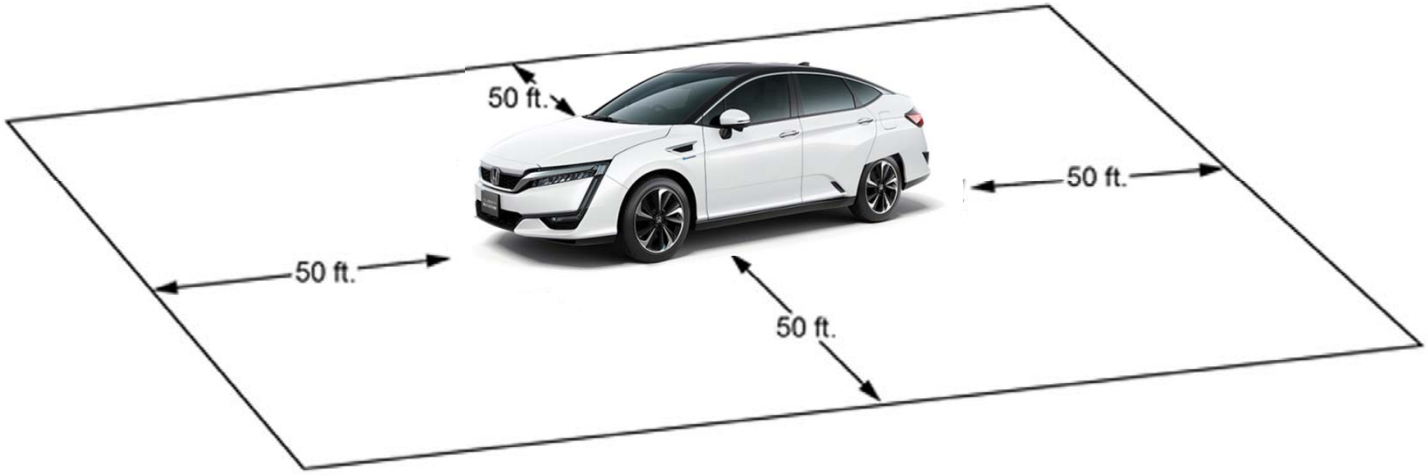
Curb Weight Rating
4,122 lb. (1,870 kg)

Storing the Vehicle

Storage and isolation recommendations.

1. Open Perimeter Isolation:

   - Store the vehicle in an outdoor area separated from all combustibles and structures by a minimum distance of **50 feet (15.2 m)** from all sides.



2. Barrier Isolation:

   - Store the vehicle 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 or prevent the fire from extending to adjacent vehicles.
   - Barriers should be of sufficient height to direct any flame or heat away from adjacent vehicles.
   - If the barrier is provided only on three of the four sides of the vehicle, the open side must maintain the separation distance referenced in Open Perimeter Isolation.
   - 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 harmful gases. Therefore, a roof is not recommended for barrier isolation.

Battery Discharging

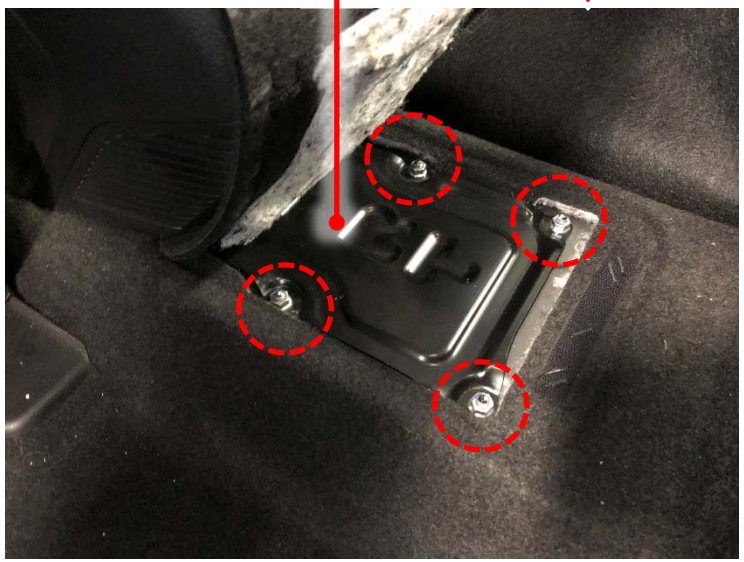
If the high-voltage battery is severely damaged **or burned**, or the vehicle has been submerged, and **water has entered and accumulated on the floor of passenger compartment**, the battery must be discharged. Failure to discharge stored or stranded energy remaining in the battery may result in a fire or reignition due to a damaged or short circuit.

See Section 3 (Disable Direct Hazards / Safety Regulations) for procedures including disconnecting the 12-volt battery.

If touching high-voltage cables and other high-voltage components is unavoidable, personal protective equipment (insulating gloves, goggles, and boots) should always be worn.

1. Open the windows or doors as there is as risk of hydrogen gas filling the interior.
2. Move the driver's seat forward.
3. Disconnect the 12-volt battery.
4. Fold up the pre-cut section of the carpet located under the back side of the center console.
5. Remove the service plug cover 10 mm bolts, then remove the service plug cover.

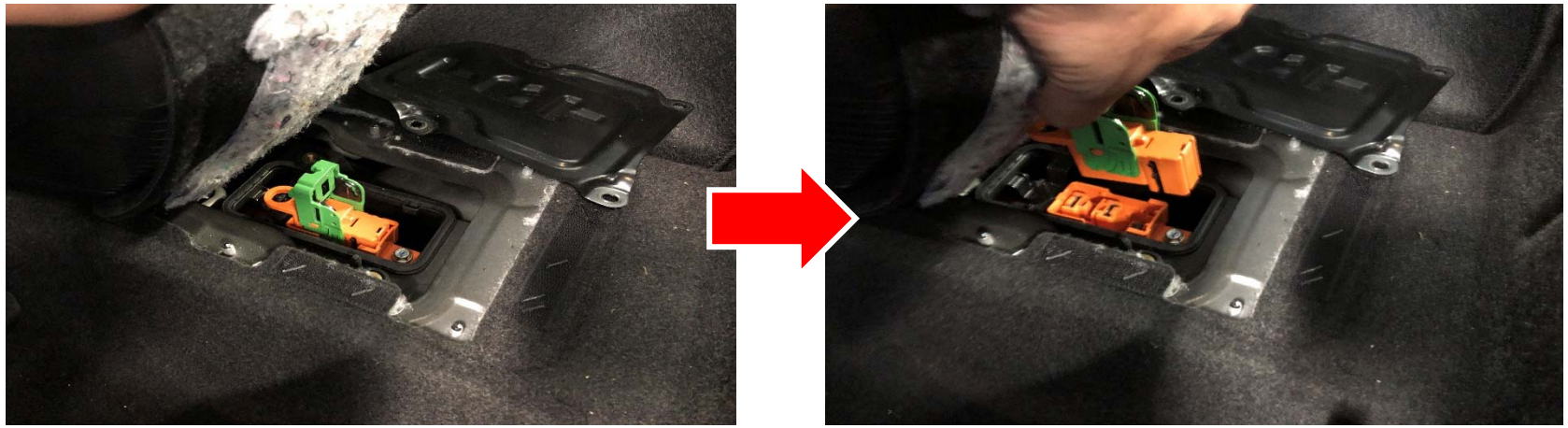
Continued on the next page.



Battery Discharging (continued)

6. Push and slide the tab on this service plug until you hear a click.

7. Raise the lever and remove the service plug.



Continued on the next page.

Battery Discharging (continued)

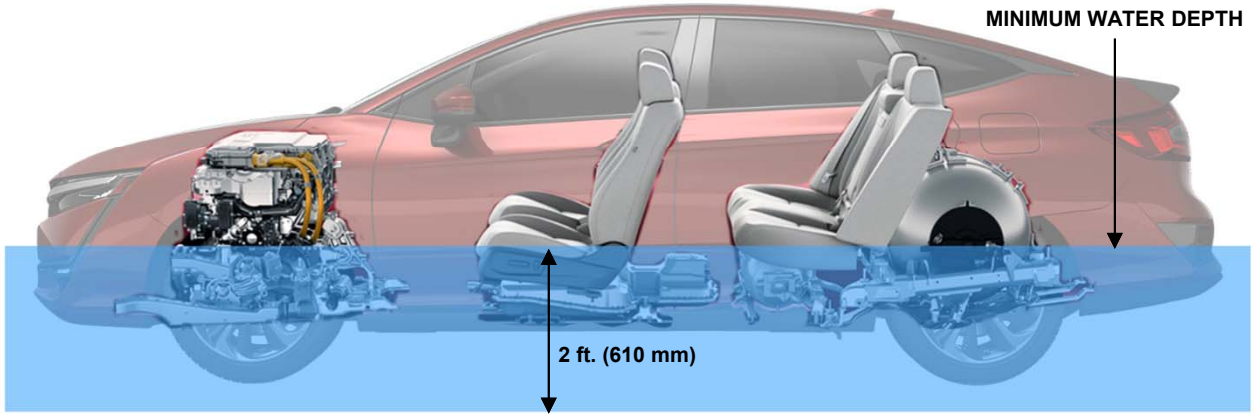
8. Set up a pool approximately **18 feet long x 8 feet wide x 3 feet high** in a well-ventilated outdoor area.

9. Use a forklift or similar equipment to place the vehicle in the center of the pool.

10. Fill the easy set pool with water from a fire hydrant, well water, or pond water until the high voltage battery is completely submerged. If there is a risk of water leakage from the easy set pool, place a thick plastic sheet under the pool.

    Never use seawater or any water containing salt.

11. Continue filling the easy set pool to a minimum depth of **2 feet (610 mm)** until the high voltage battery is completely submerged.



12. Maintain this water level for at least **3.5 days**. If the water level drops below the minimum specified level, add fresh water.

    Since the water used for discharging the battery is converted to an aqueous solution containing metals such as Phosphorus (P) and Lithium (Li), dispose of it properly as an industrial waste according to local regulations.

Lithium-Ion Battery Fumes or Fire

A damaged high-voltage lithium-ion battery can emit toxic fumes, and the organic solvent used as electrolyte is flammable and corrosive. Responders should wear appropriate personal protective equipment. Even after a lithium-ion battery fire appears to have been extinguished, a renewed or delayed fire can occur. The battery manufacturer cautions responders that extinguishing a lithium-ion battery fire will take a large and sustained volume of water.

In order to minimize the possibility of collateral fire damage, responders should always ensure that a Honda Clarity Fuel Cell with a damaged battery is kept outdoors and far away from other flammable objects.

Lithium-Ion Battery Fluid

Avoid contact with the high-voltage battery fluid. The high-voltage battery contains a flammable electrolyte that could leak as a result of a severe crash. Avoid any skin or eye contact with the electrolyte as it is corrosive. If you accidentally touch it, flush your eyes or skin with a large quantity of water for at least **5 minutes** and seek medical attention immediately.

Electric Shock

Unprotected contact with any electrically charged high-voltage component can cause serious injury or death. Receiving an electric shock from a Honda Clarity Fuel Cell, however, is highly unlikely because of the following:

- Contact with the battery module or other high-voltage components can only occur if they are damaged and the contents are exposed, or if they are accessed without following proper precautions.
- Contact with the electric motor can only occur after one or more components are removed.
- The high-voltage cables can be easily identified by their distinctive orange color, and contact with them can be avoided.

If severe damage causes high-voltage components to become exposed, responders should take appropriate precautions and wear appropriate insulated personal protective equipment.

Disposal

The lithium-ion battery, the high-voltage battery fluid, and the water used to discharge the battery must be properly disposed of as industrial waste according to local regulations.

Seat Belts and Airbags

The Honda Clarity Fuel Cell is equipped with lap/shoulder belts in all seating positions. The front seat belts are equipped with pyrotechnically activated tensioners that help tighten the seat belt in a sufficient crash.

In addition, the Honda Clarity Fuel Cell is equipped with the following airbags:

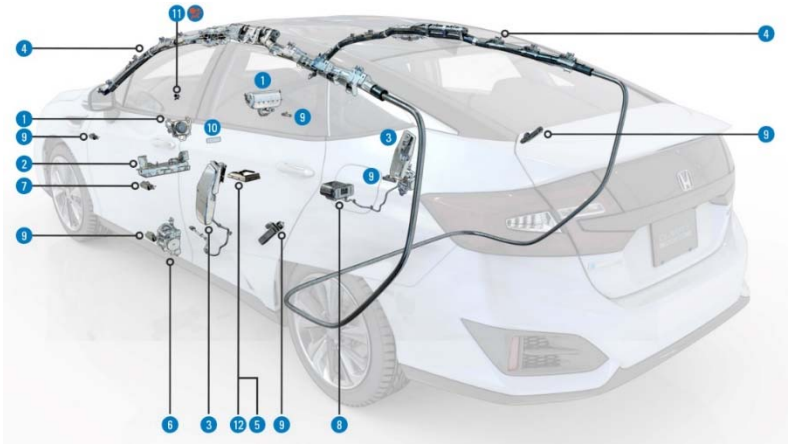
- **Front Airbags** – Driver/Front Passenger
- **Side Airbags** – Driver/Front Passenger
- **Side Curtain Airbags** – Driver's Side/Passenger Side
- **Knee Airbag** – Driver

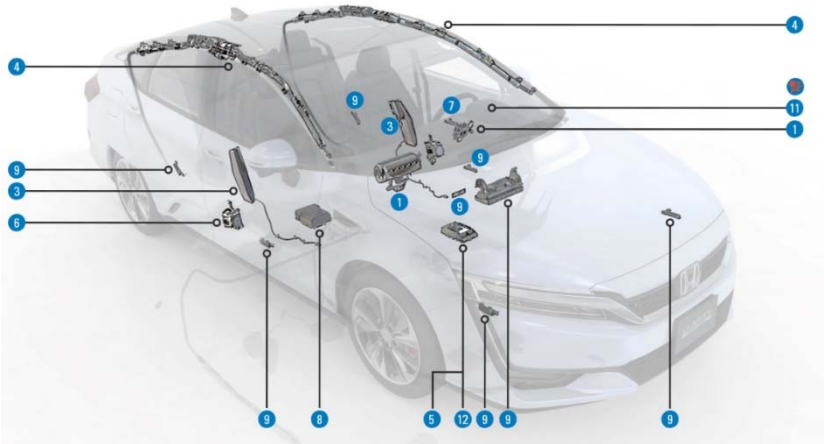
It takes up to **3 minutes** for the airbags and tensioners to power off after the 12-volt system has been turned off by following the emergency shutdown procedures described in this guide.

In a collision severe enough to deploy one or more of the airbags, the Honda Clarity Fuel Cell electrical system is designed to automatically open the high-voltage electrical contactors. This disconnects the high-voltage battery from the other high-voltage components and stops the flow of electricity in the high-voltage cables.

However, responders should always assume that the high-voltage system is powered on, and take the appropriate action described in this guide to power off the system.

1. Front Airbags
2. Driver's Knee Airbag
3. Side Airbags
4. Side Curtain Airbags
5. SRS Unit
6. Front Seat Belt Tensioners
7. Driver's Seat Position Sensor
8. Passenger's Seat Weight Sensor
9. Impact Sensor
10. Passenger's Airbag OFF Indicator
11. SRS indicator
12. Rollover Sensor





Vehicle Collision

In the event of a crash, the supplemental restraint system (SRS) unit makes a judgment based on input from the impact sensors. If the input values meet various threshold requirements, the SRS unit sends a signal to the high-voltage battery electronic control unit (ECU). The high-voltage battery ECU then turns off the high-voltage battery contactors, stopping the flow of electrical current from the high-voltage battery.

When responding to an incident involving a Honda Clarity Fuel Cell, we recommend that emergency personnel follow their organization's standard operating procedures for assessing and dealing with vehicle emergencies.

Honda recommends that responders follow the procedures in this guide to avoid potentially lethal shock from high voltage.

Crash Detection System

The vehicle is equipped with sensors that can detect a serious impact to the vehicle. If the impact is severe enough to deploy any airbag, the system controller will automatically shut off the flow of hydrogen and high-voltage electrical current.

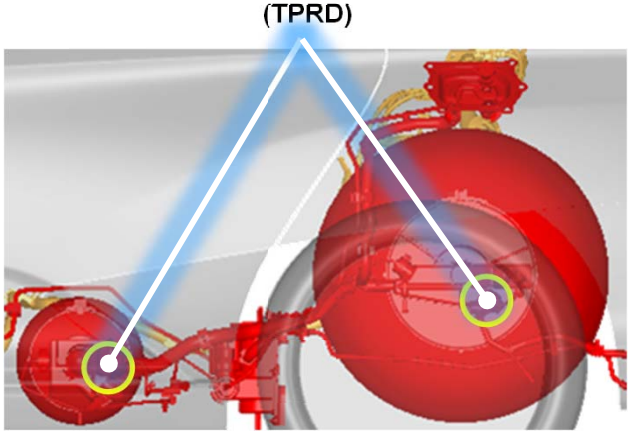
While the hydrogen flow stops immediately, it takes about **3 minutes** before the high-voltage system is completely shut down. If the vehicle is involved in a crash when the vehicle is turned off, the system can stop the flow of hydrogen in some cases.

Hydrogen Tank Safety Valves

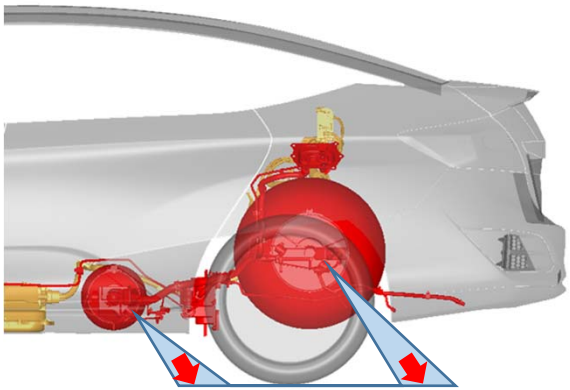
The hydrogen tanks contain an internal solenoid valve with three safety valves. One prevents backflow during refueling. Another stops the flow of hydrogen when signaled by the system controller. The third is a thermally activated relief device (TPRD) that releases hydrogen from the tanks if the TPRD is exposed to temperatures above approximately **226°F (108°C)**.

If the pressure relief valve opens, hydrogen will be released directly from the hydrogen tanks in the direction shown below. You may hear a hissing or a roaring as the hydrogen escapes, and it can take up to **5 minutes** for a full tank to empty. Although pure hydrogen flames are invisible, you will see colored flames if other parts of the vehicle are burning.

Thermally-activated Pressure Relief Device (TPRD)



Hydrogen Release Direction

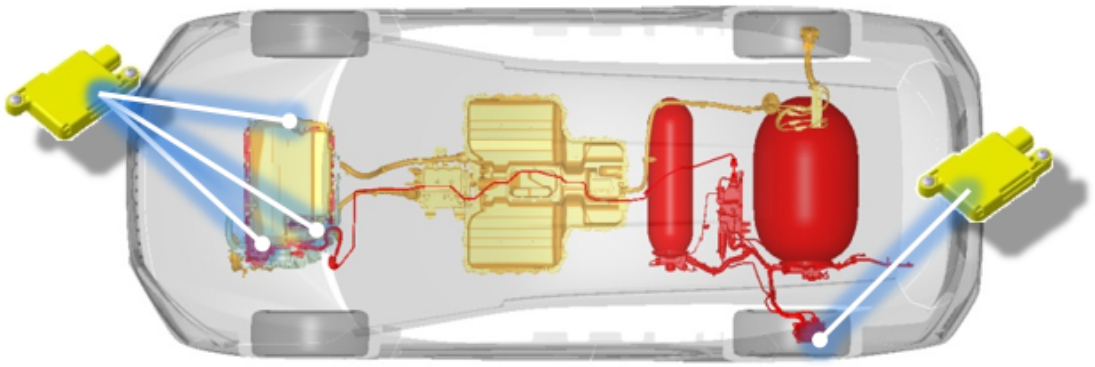


Hydrogen Sensors

In addition to the safety valves, four hydrogen sensors are located on the vehicle. If a potentially hazardous leak is detected, the system controller will automatically stop the flow of hydrogen from the tank.

A message **Hydrogen Leak Detected. Power Reduced** or **Pull Over When Safe. Hydrogen Leak Detected** will appear in the multi-information display of the gauge assembly.

Hydrogen Sensors



Components

High-Voltage Components

12-Volt Battery

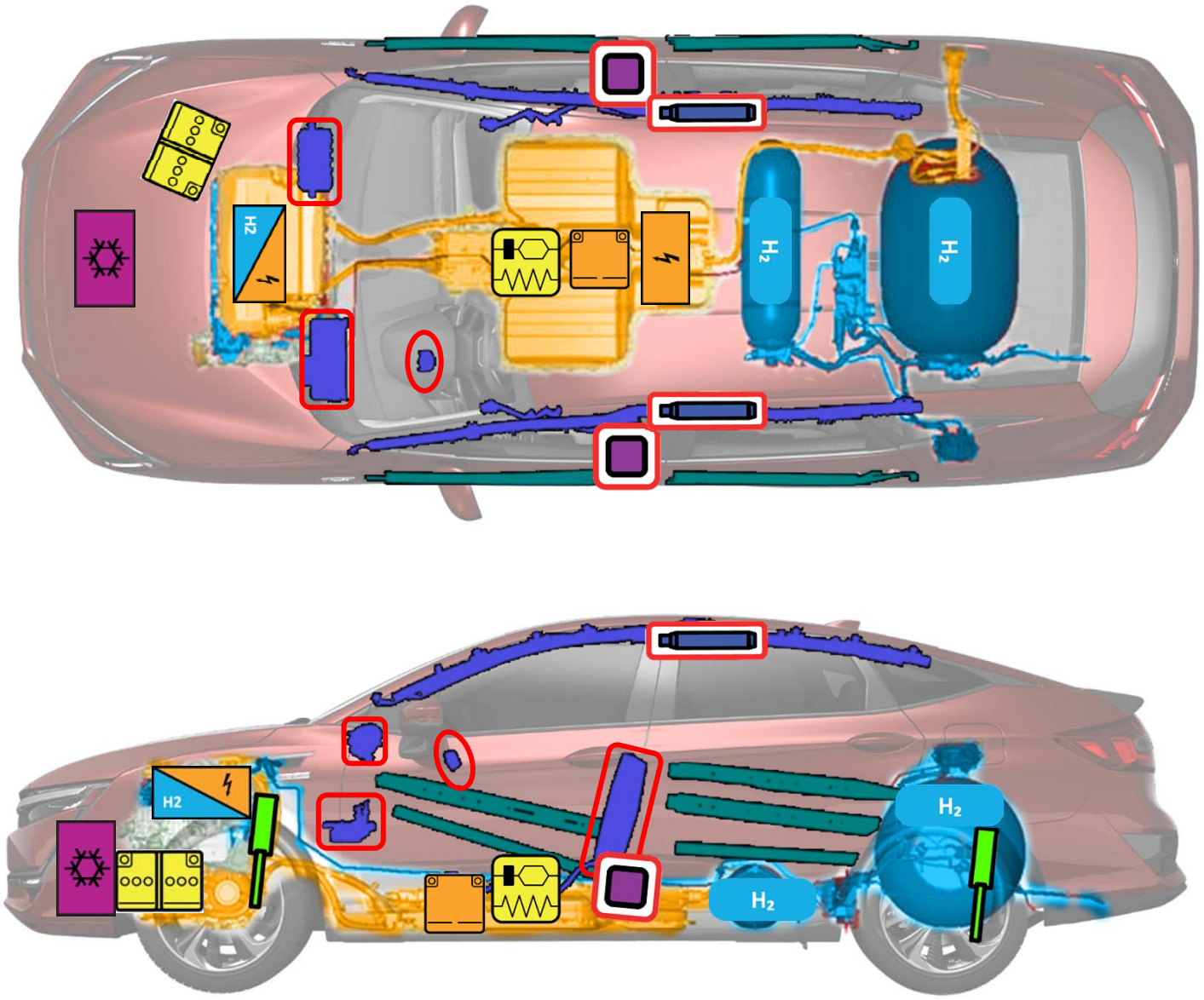
SRS Components

Gas Strut

Hydrogen Tank

Reinforcement

Seat Belt Pretensioners



Dealer Inspection and Repair

A damaged Honda Clarity Fuel Cell should be taken to an authorized Honda dealer for a thorough inspection and repairs. For questions or to locate an authorized Honda dealer, please contact any of the local Honda dealers shown or Honda Automobile Customer Service at **(800) 999-1009**.

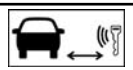
High-Voltage Battery Recycling

The high-voltage lithium-ion battery requires special handling and disposal. If disposal is necessary, please contact your local Honda dealer or American Honda's Hybrid Battery Consolidation Center at **(800) 555-3497**.

BLUE SKIES FOR OUR CHILDREN

Northern California		
City	**Dealer Name**	**Telephone Number**
Colma, CA	Honda of Serramonte	(888) 892-5396
Dublin, CA	Dublin Honda	(877) 412-7199
Oakland, CA	Honda of Oakland	(800) 352-1859
Palo Alto, CA	Anderson Honda	(650) 843-6041
Roseville, CA	AutoNation Honda Roseville	(916) 467-8056
San Jose, CA	Honda of Stevens Creek	(855) 357-6146

Southern California		
City	**Dealer Name**	**Telephone Number**
Cerritos, CA	Norm Reeves Honda Superstore	(888) 849-4466
Culver City, CA	Culver City Honda	(424) 298-4875
Irvine, CA	Norm Reeves Honda Superstore Irvine	(888) 721-4053
Pasadena, CA	Honda of Pasadena	(866) 788-5832
Torrance, CA	Scott Robinson Honda	(855) 725-2211
Woodland Hills, CA	Woodland Hills Honda	(800) 494-1164

Pictogram	Name	Pictogram	Name
	Hydrogen tank overpressure valve		SRS control unit
	Hood release/opener control		Fuel cell component
	Tailgate/cargo area opener control		Hydrogen gas tank
	Power switch		High-voltage battery pack
	Keyless operation key distance		High-voltage component
	Fuse box disabling high-voltage		High-voltage power cable
	Cable to cut to disconnect high-voltage		Air-conditioning component
	High-voltage service plug		General warning
	Steering wheel height adjustment control		Electricity or dangerous voltage
	Seat height adjustment control		Use a thermal infrared camera
	Forward or backward seat adjustment control		Use water to extinguish the fire
	Lifting point		Use ABC powder to extinguish the fire
	Airbag		Flammable
	Airbag inflator		Gases under pressure
	Seat belt pretensioner		Corrosive
	Gas strut		Hazardous to human health
	12-volt battery		Environmental hazard

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