HONDA

NSX

2017~ Honda NSX Emergency Response Guide

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This guide has been prepared to assist emergency service professionals in identifying a 2017~ Honda NSX and safely respond to incidents involving this vehicle.

Copies of this guide and other emergency response guides are available for reference or downloading at *www.techinfo.honda-eu.com.*

For any questions, please contact your local authorised Honda NSX dealer.

All 2017~ Honda NSX models are equipped with a hybrid powertrain system and no special markings or emblems are applied to the exterior of the vehicle.

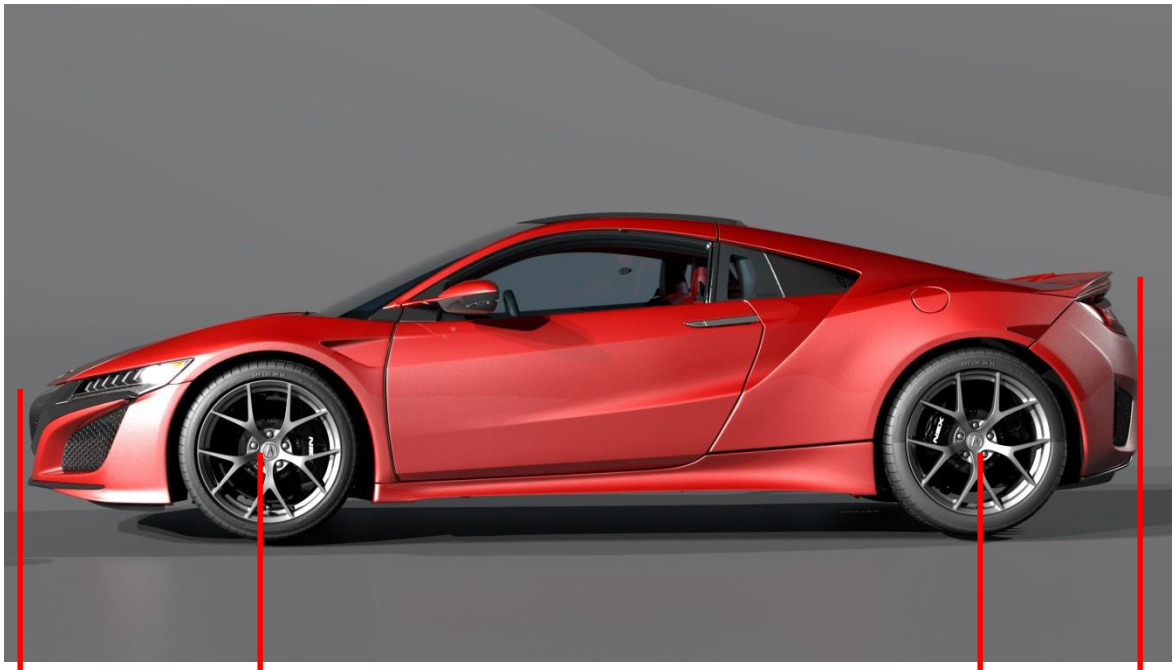
A 2017~ Honda NSX can also be identified by inspecting the VIN at the three locations shown below. Digits 4–6 of the VIN will show **NC1** indicating that it is a Honda NSX.

1HG**NC1*******000001

Stamped into the floor panel behind the passenger seat under a plastic panel marked **FRAME NUMBER**

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

Printed on the VIN label on the driver's door opening

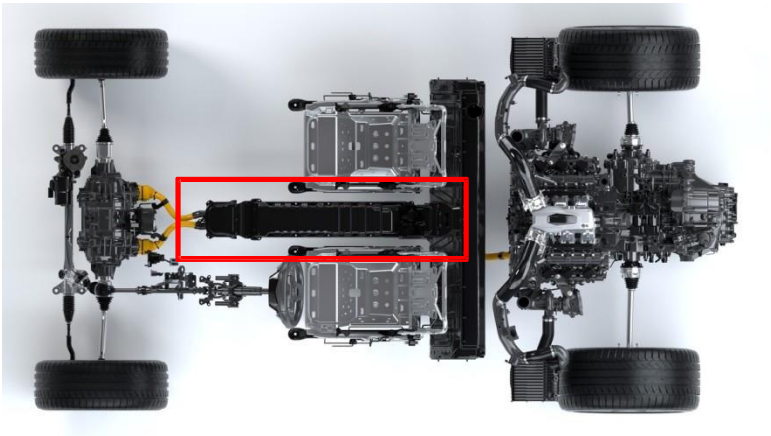

2,629 mm (103.5 in)
4,470 mm (176 in)

1,214 mm (47.8 in)
2,217 mm (87.3 in)

Key Components

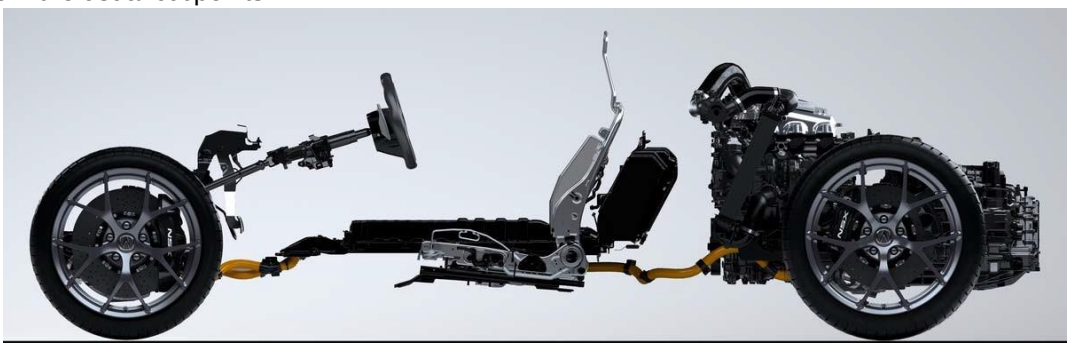
Power Drive Unit (PDU)

The PDU is located below the center console and houses the liquid-cooled inverter. There are no serviceable parts inside, so there is no reason for it to be opened or disassembled.



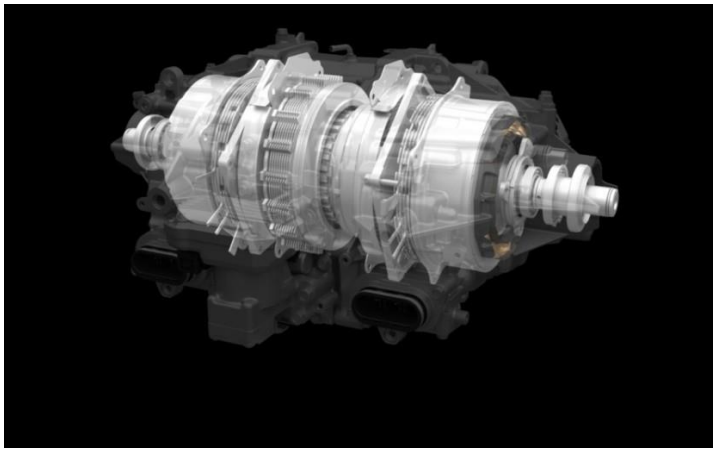
High-Voltage Cables

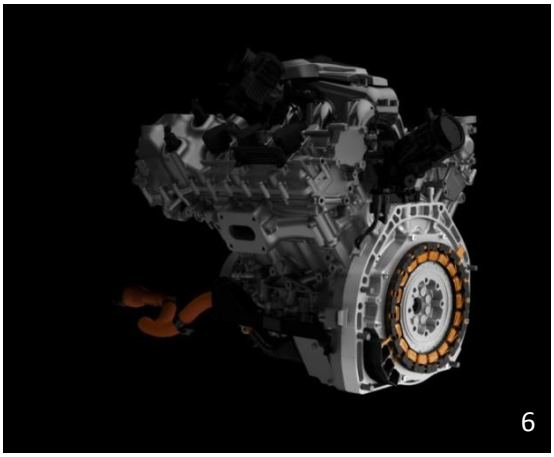
High voltage flows through easy-to-identify, heavy-duty orange cables. These cables are purposely routed through areas away from the usual cut points.



Electric Motor/Generator

The Honda NSX incorporates one electric motor/generator that is attached to the petrol engine and transmission and two electric motors located between the front wheels in the twin motor unit.





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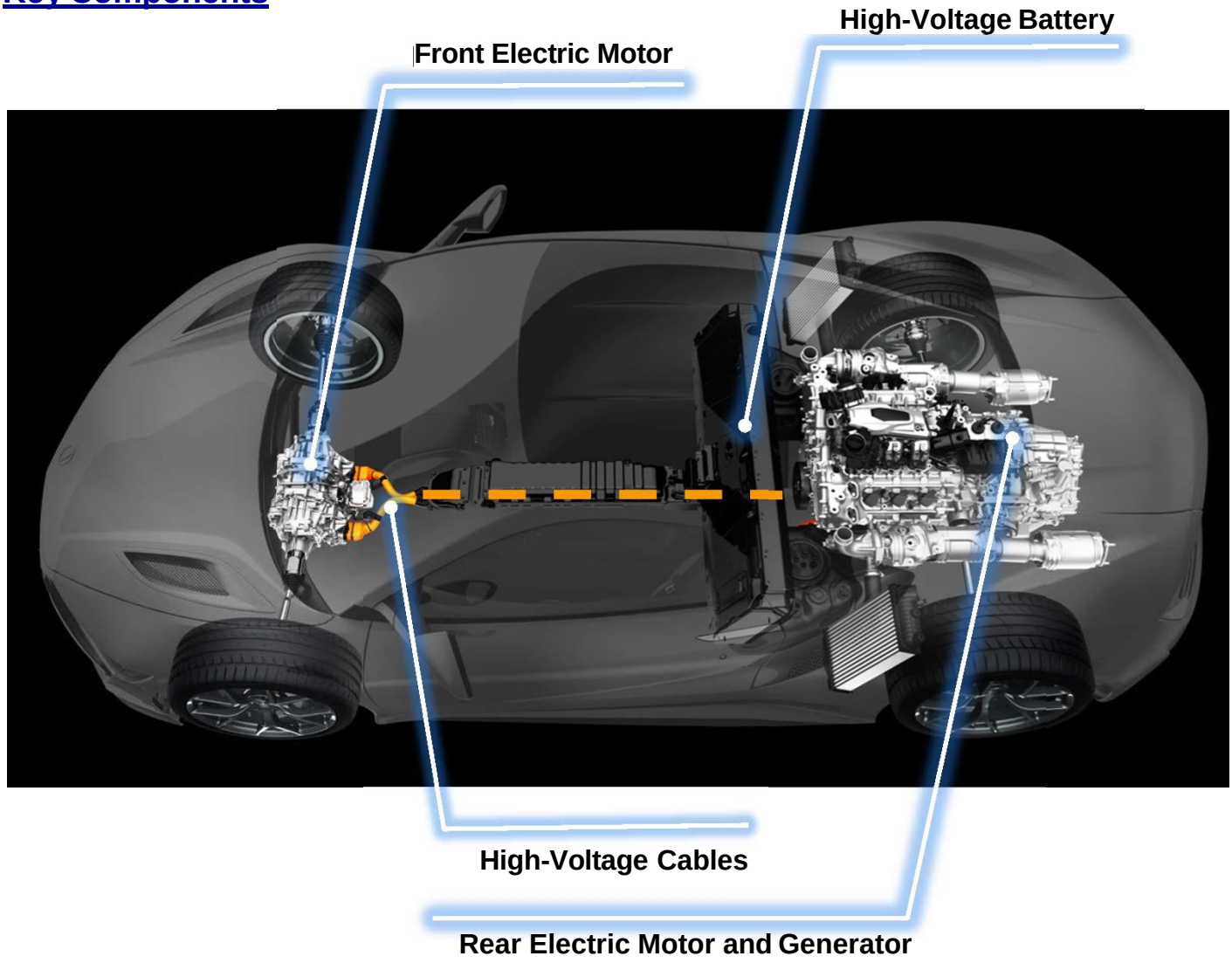

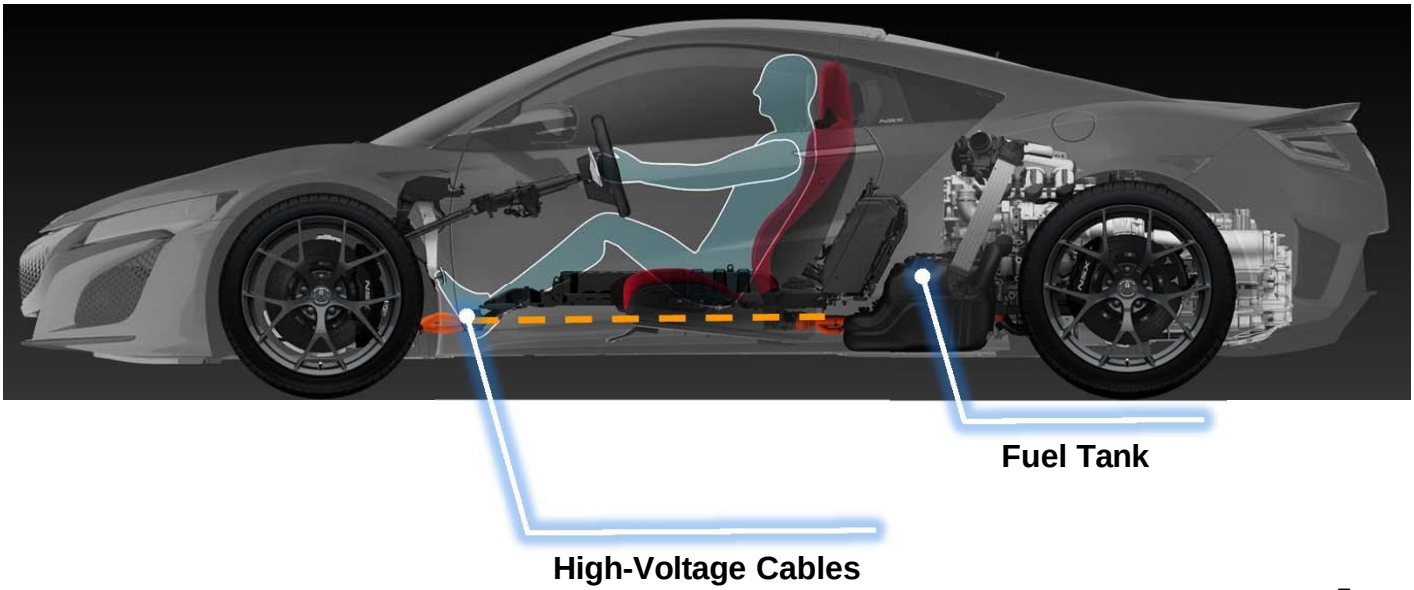

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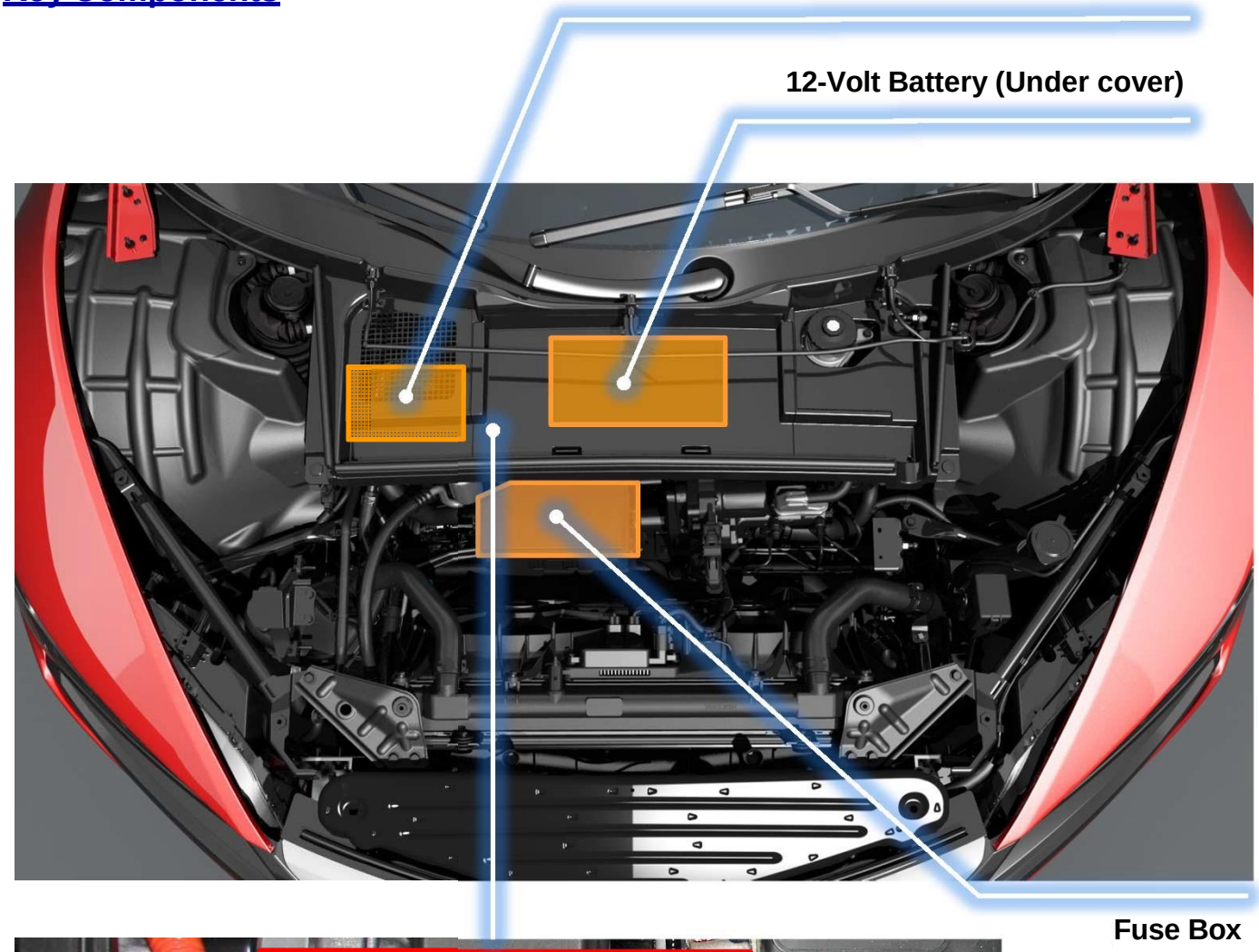
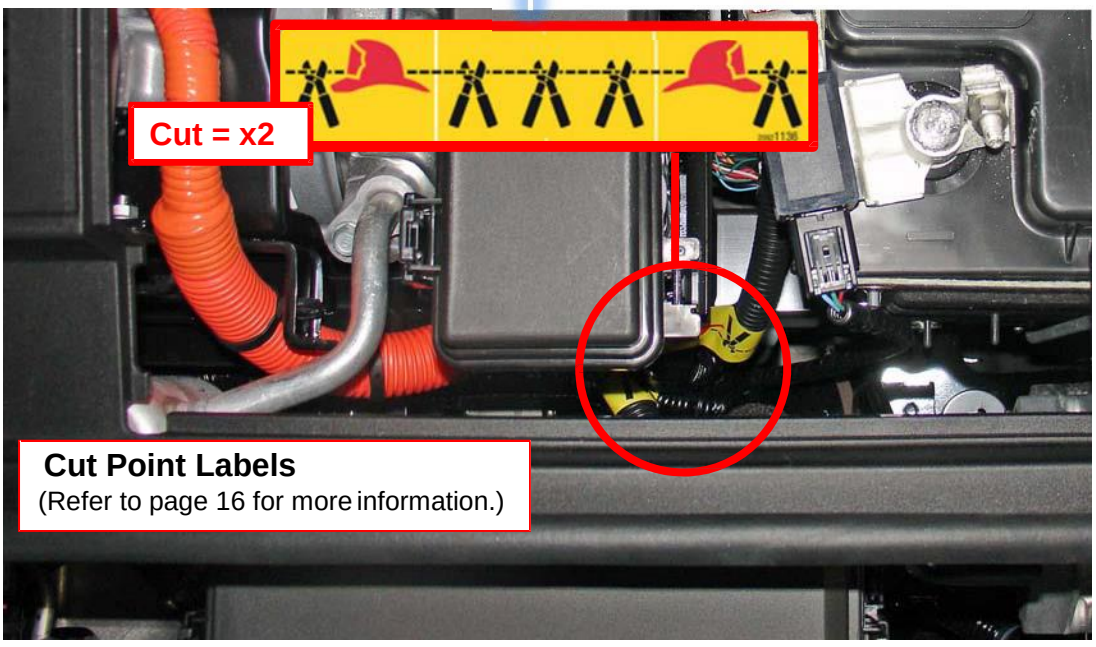
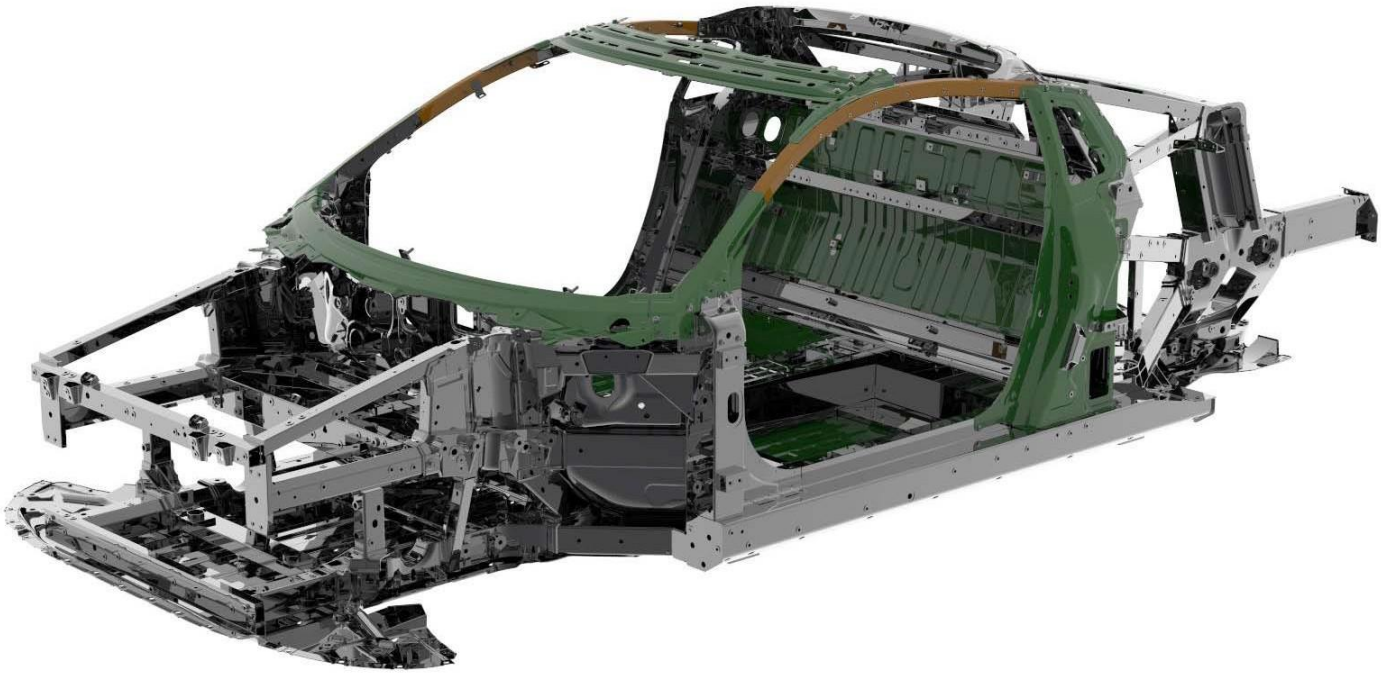


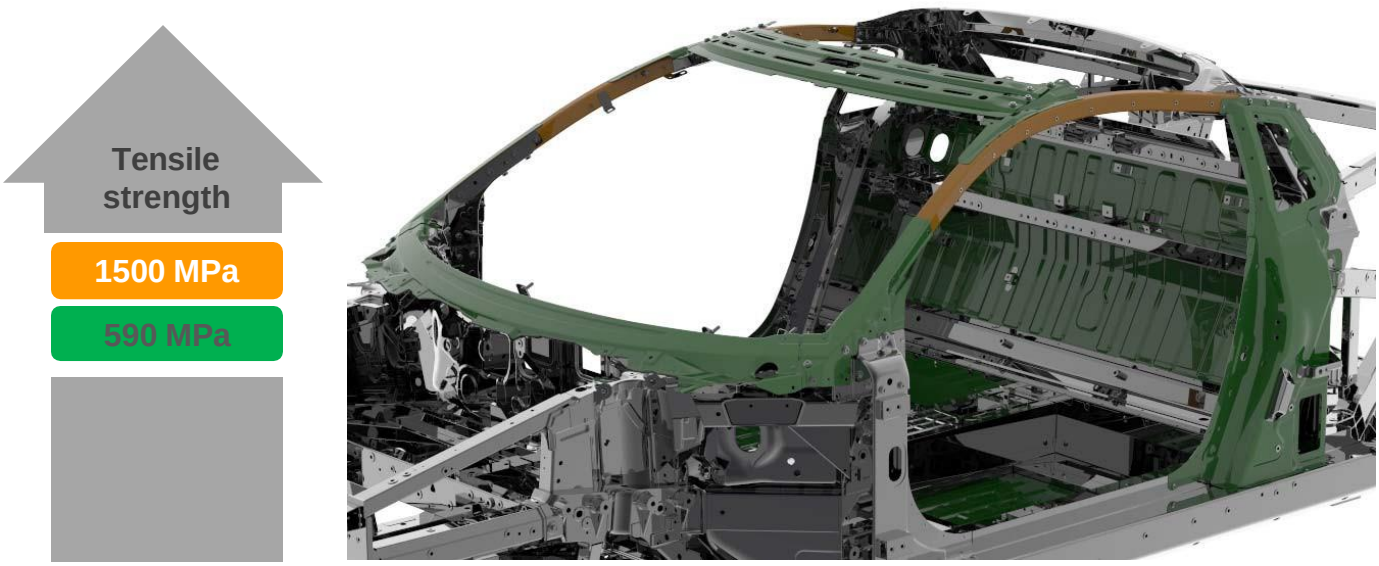


High-Strength and Ultra-High-Strength Steel

The frame of the Honda NSX is comprised mostly of aluminum however, high-strength and ultra-high-strength steel is used in the colored areas.

The body panels are comprised of various materials such as aluminum, plastic, and other composites.



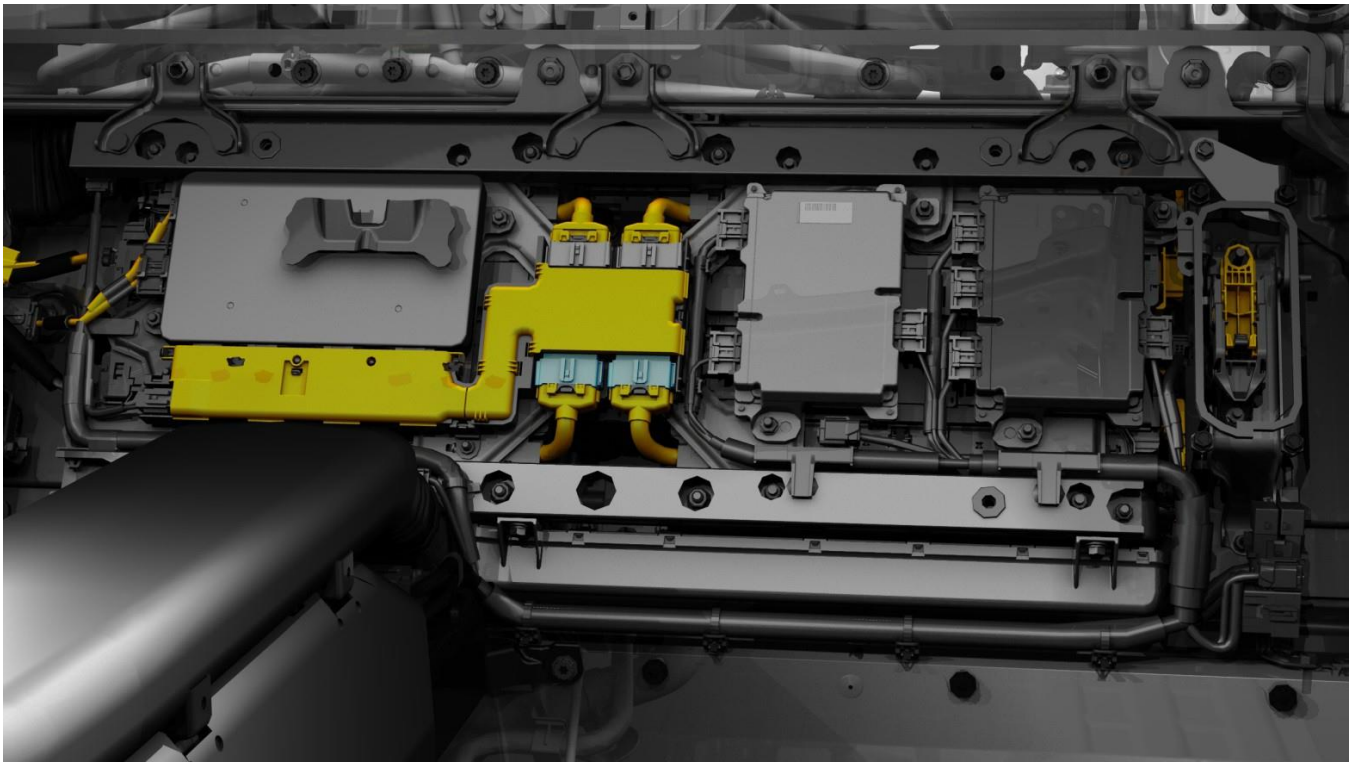


12-Volt Battery

A conventional 12-volt battery is located under the front hood of the vehicle. This battery powers the airbags, lights, audio system, and other standard 12-volt system components. In an emergency situation, it may be necessary to disconnect or cut the 12-volt battery negative cable.

High-Voltage Battery

The high-voltage battery is located in a well-protected area behind the seats. The HV battery ECU, the battery contactors, a forced air cooling system, and other battery system controls are housed within the battery pack.



Seatbelts and Airbags

The Honda NSX is equipped with lap/shoulder belts in both seating positions. The seat belts are equipped with pyrotechnically activated tensioners that help tighten the seat belt in a crash.

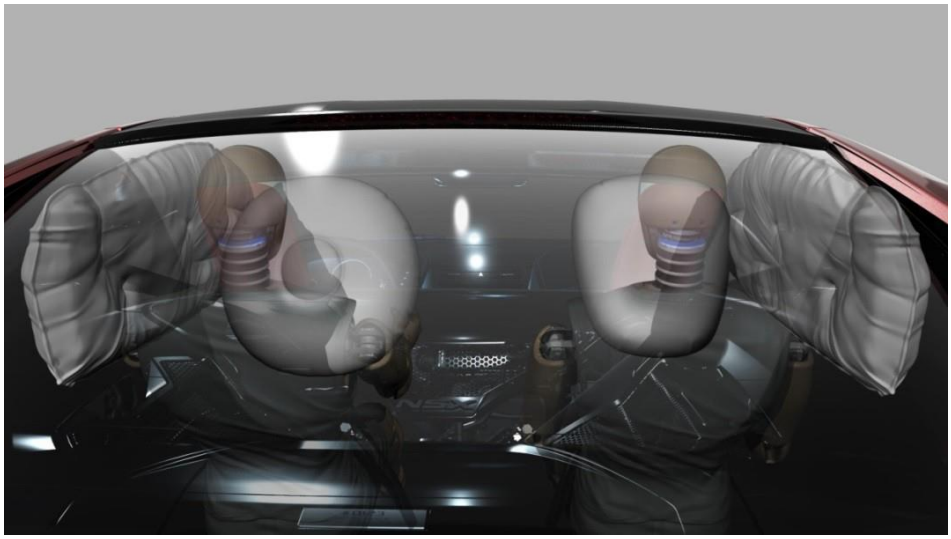
In addition, the Honda NSX is equipped with the following airbags:

- Front Airbags - Driver / Passenger
- Side Airbags - Driver / Passenger
- Side Curtain Airbags - Driver / Passenger
- Knee Airbag - Driver

In a collision severe enough to deploy one or more of the airbags, the Honda NSX 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.

Responders should always assume, however, that the HV system is powered on and take the appropriate action described later in this guide to power off the system.

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 provided later in this guide.



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, so 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.

Responders should always ensure that a Honda NSX with a damaged battery is kept outdoors and far away from other flammable objects in order to minimize the possibility of collateral fire damage should the battery catch on fire.

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 NSX, 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.

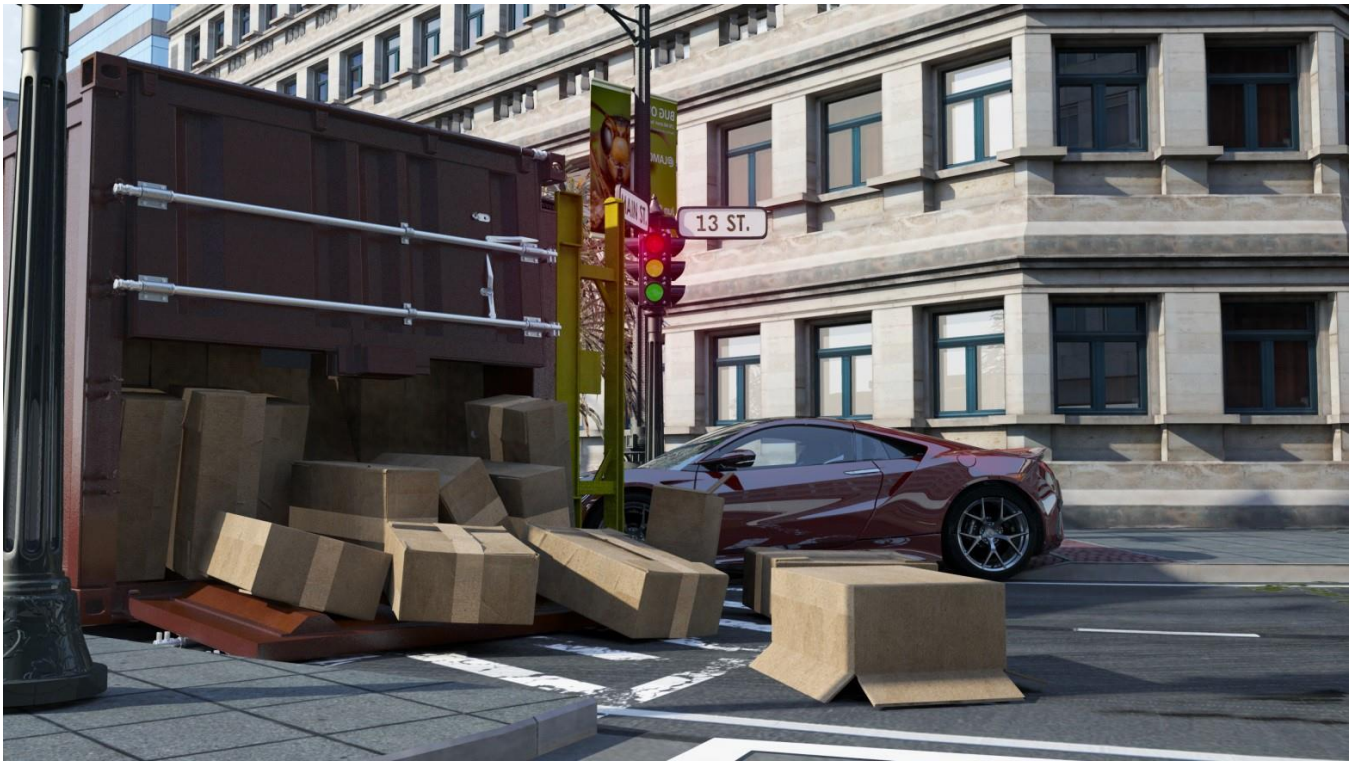
If severe damage causes high-voltage components to become exposed, responders should take appropriate precautions and wear appropriate insulated personal protective equipment.

Vehicle Collision

In the event of a crash, the airbag control unit makes a judgment based on input from the impact sensors. If the input values meet various threshold requirements, the SRS (Supplemental Restraint System) unit sends a signal to the high-voltage battery 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 NSX, we recommend that emergency personnel follow their organisation's standard operating procedures for assessing and dealing with vehicle emergencies.

Given our knowledge of the Honda NSX, we also recommend that responders follow the procedures on the following pages to avoid potentially lethal shock by high voltage.



Submerged Vehicle

If a Honda NSX is submerged or partly submerged in water, first pull the vehicle out of the water. Then, shut down the high-voltage system using one of the two procedures described on the following pages.

Aside from severe damage to the vehicle, there is no risk of 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.

Preventing Current Flow Through High-Voltage Cables

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

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

BEST METHOD for High-Voltage Shutdown

Push and hold the ENGINE START/STOP button for 3 seconds.

This simple action turns off the petrol engine 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 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 10 meters away.

If you cannot locate the keyless remote, you should also do the SECOND-BEST METHOD for high-voltage shutdown (for preventing high-voltage current flow) on the following page.

SECOND-BEST METHOD for High-Voltage Shutdown

Locate and cut the negative 12-volt battery cable and the DC to DC converter cable.

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

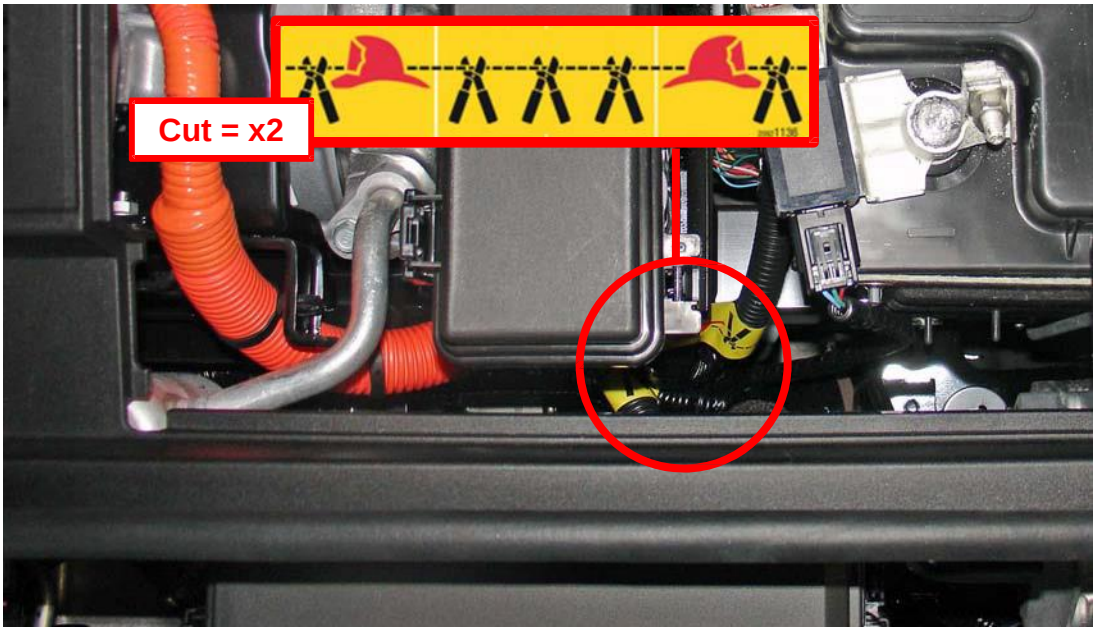
1. Pull the hood release handle located on the driver's left kick-panel.

2. Locate the hood latch lever, push the lever, and lift the hood.

3. Locate the two cut point labels (shown in the picture below) and cut the cables at those points.

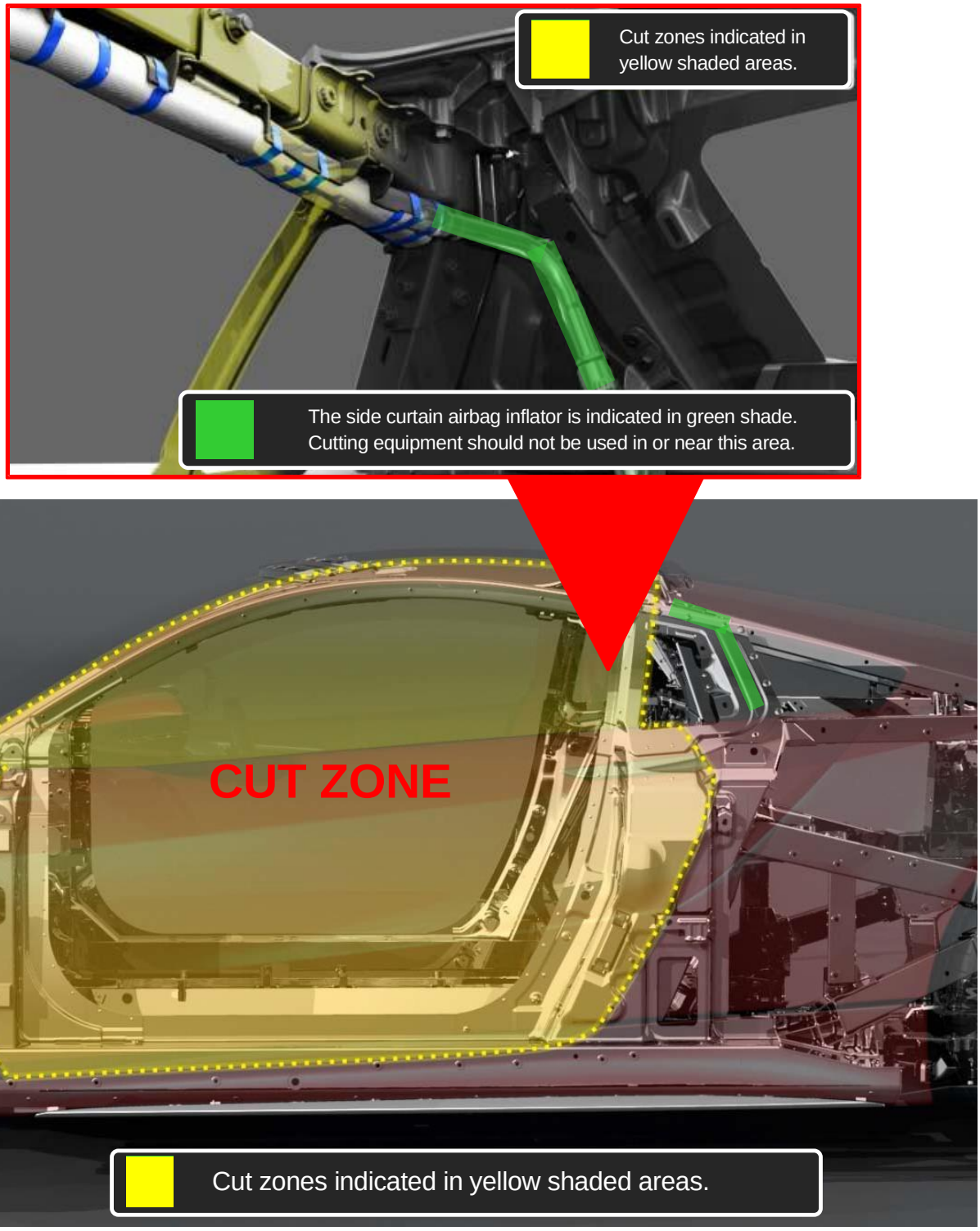
When cutting the cables, do not allow the cutting tool to contact any surrounding metal parts; electrical arcing could occur, which can ignite any flammable vapors.

NOTE: 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.



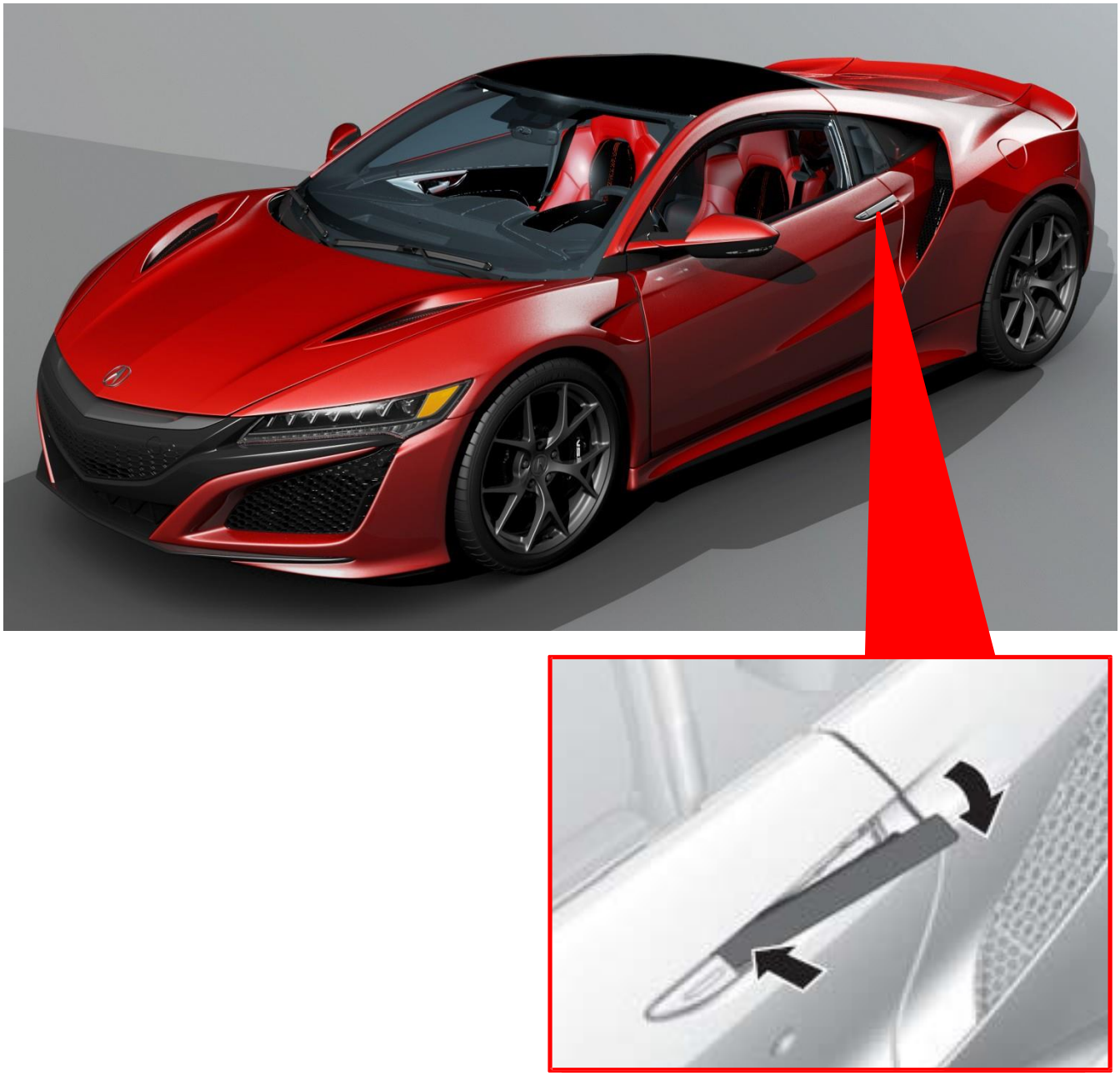
Extricating Occupants

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 indicated in the illustration below.



Extricating Occupants

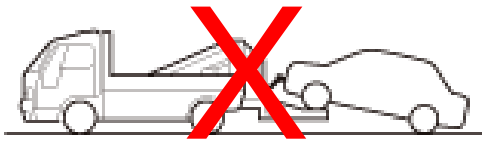
In the event of an emergency, simply push in the front edge of the outer door handle so that the handle pops out, then pull the outer handle toward you and open the door. The door will open as long as the door is unlocked.



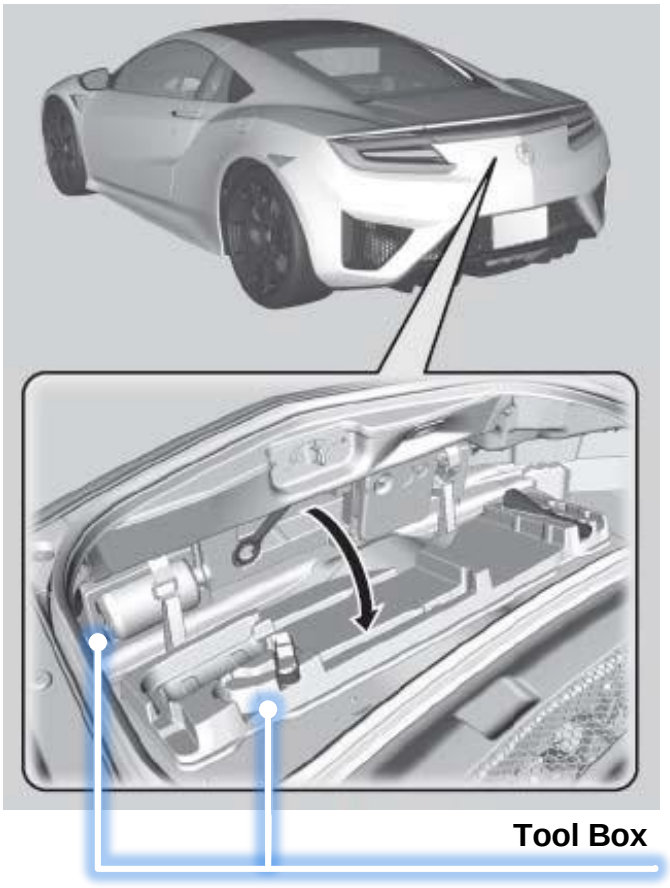
Emergency Towing

The preferred method is to use a flat-bed tow truck. If wheel lift equipment must be used, be sure to suspend the front wheels and release the parking brake.

Be aware that when rolling a damaged Honda NSX 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.

		
Flat-bed Tow Truck Equipment	Cable-type Equipment	Front Wheel Lift Equipment

The towing hook is located within the tool kit located in the trunk. To install the towing hook, remove the cap from the front bumper using a flat-tip screwdriver. Insert the towing hook, then turn it clockwise until it is tight.



Dealer Inspection and Repair

A damaged Honda NSX should be taken directly to an authorised Honda NSX dealer for a thorough inspection and repairs. For any questions, please contact your local authorised Honda NSX dealer.

High-Voltage Battery Recycling

The high-voltage lithium-ion battery requires special handling and disposal. If disposal is necessary, please contact your local authorised Honda NSX dealer.