2026 NISSAN LEAF ELECTRIC

Emergency Response Guide

INFORMATION FOR FIRST AND SECOND RESPONDERS

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Introduction

This document is intended to provide information to the first responders when carrying out rescue operations. It can also be useful for road assistance.

The document provides a comprehensive set of useful, relevant information, like:

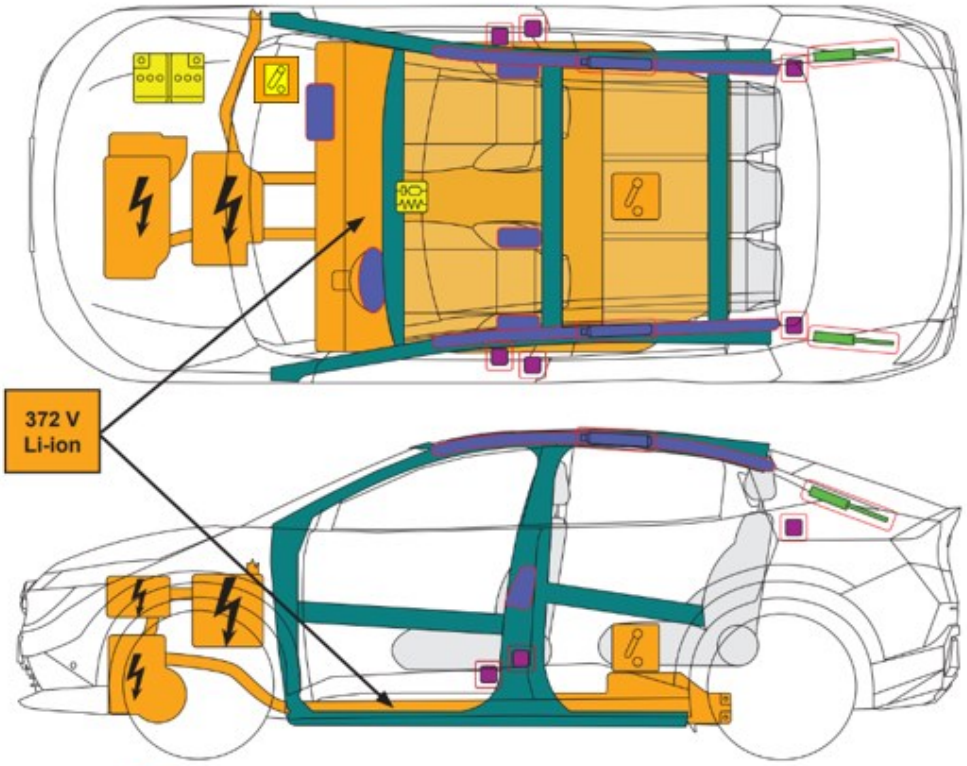
- to recognize the right model,
- to learn about its main technical features,
- to identify the risks inherent to the onboard technology and therefore to adapt their resources and methods to act effectively in full safety.

In this Emergency Response Guide you will find the Nissan leaf EV vehicle, sold in Europe.

Rescue Sheets have been made for each model of our vehicles. A Rescue Sheet (ISO 17840 Part 1) is “quick information” for the first responders on the accident scene.

0.RESCUE SHEET(S)

Nissan Leaf
Type: ZE2, 5-door SUV
(2026-)



Airbag	Stored gas inflator	Seat belt pretensioner	SRS control unit	Battery low voltage
Gas strut/preloaded Spring	High strength zone	High voltage device that disconnects high voltage	High voltage component	Battery pack, high voltage
High voltage power cable	Low voltage device that disconnects high voltage			

1. Identification / Recognition

⚠ LACK OF ENGINE NOISE DOES NOT MEAN VEHICLE IS OFF. SILENT MOVEMENT OR INSTANT RESTART CAPABILITY EXISTS UNTIL VEHICLE IS SHUT DOWN. WEAR APPROPRIATE PPE.

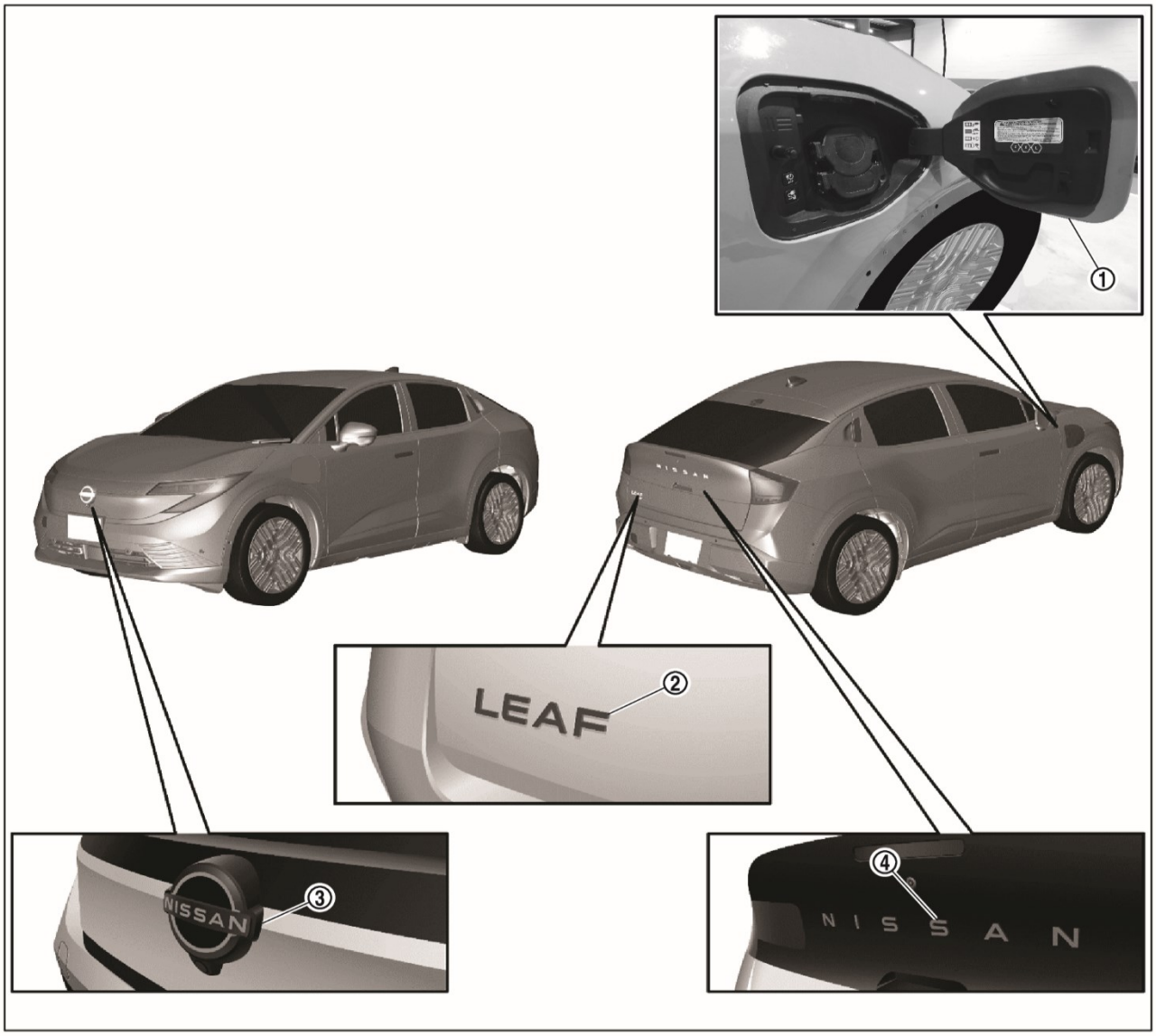
1-1 About The Nissan LEAF

This vehicle uses two types of batteries. One is a 12-volt battery that is the same as the battery in vehicles powered by internal combustion engines, and the other is the high-voltage battery for the traction motor which propels the vehicle. The high-voltage battery is encased in steel and mounted underneath the vehicle.

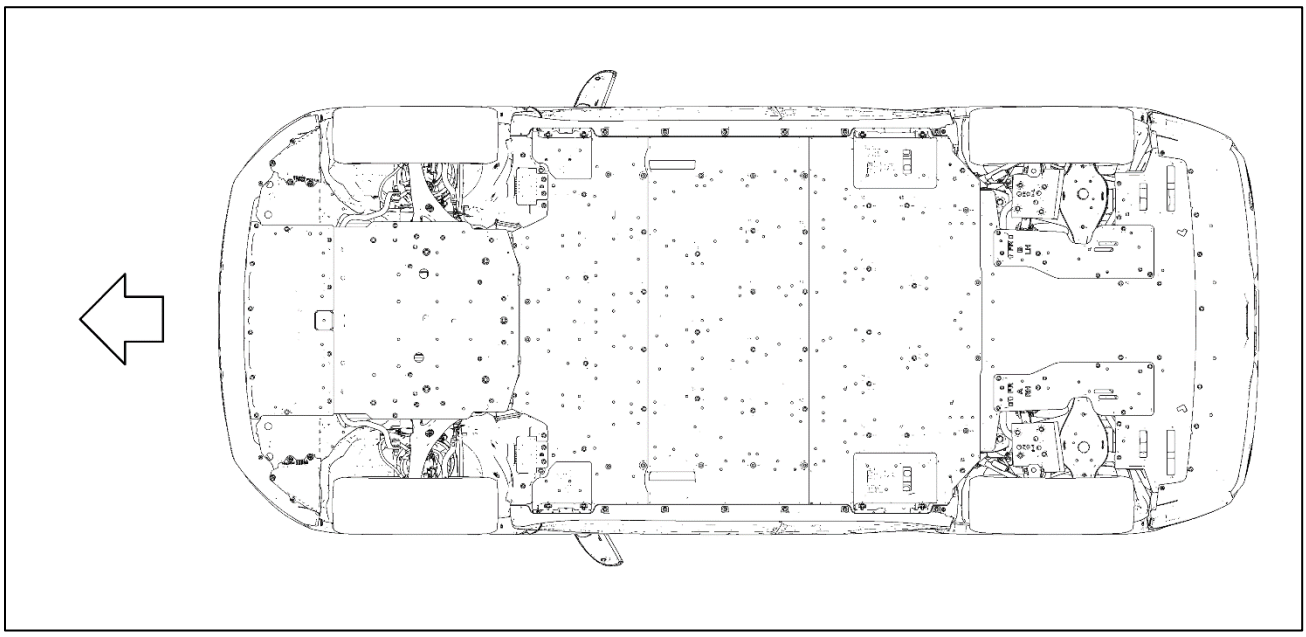
The vehicle must be plugged-in in order for the high-voltage battery to be recharged. Additionally, the vehicle system can recharge the high-voltage battery by converting driving force into electricity while the vehicle is decelerating or being driven downhill. This is called regenerative charging. This vehicle is considered to be an environmentally friendly vehicle because it does not emit exhaust gases.

1-1.1 Exterior

The specific exterior identification features are indicated as follows:



1. Charge port lid
2. Model name
3. Brand name front
4. Brand name rear

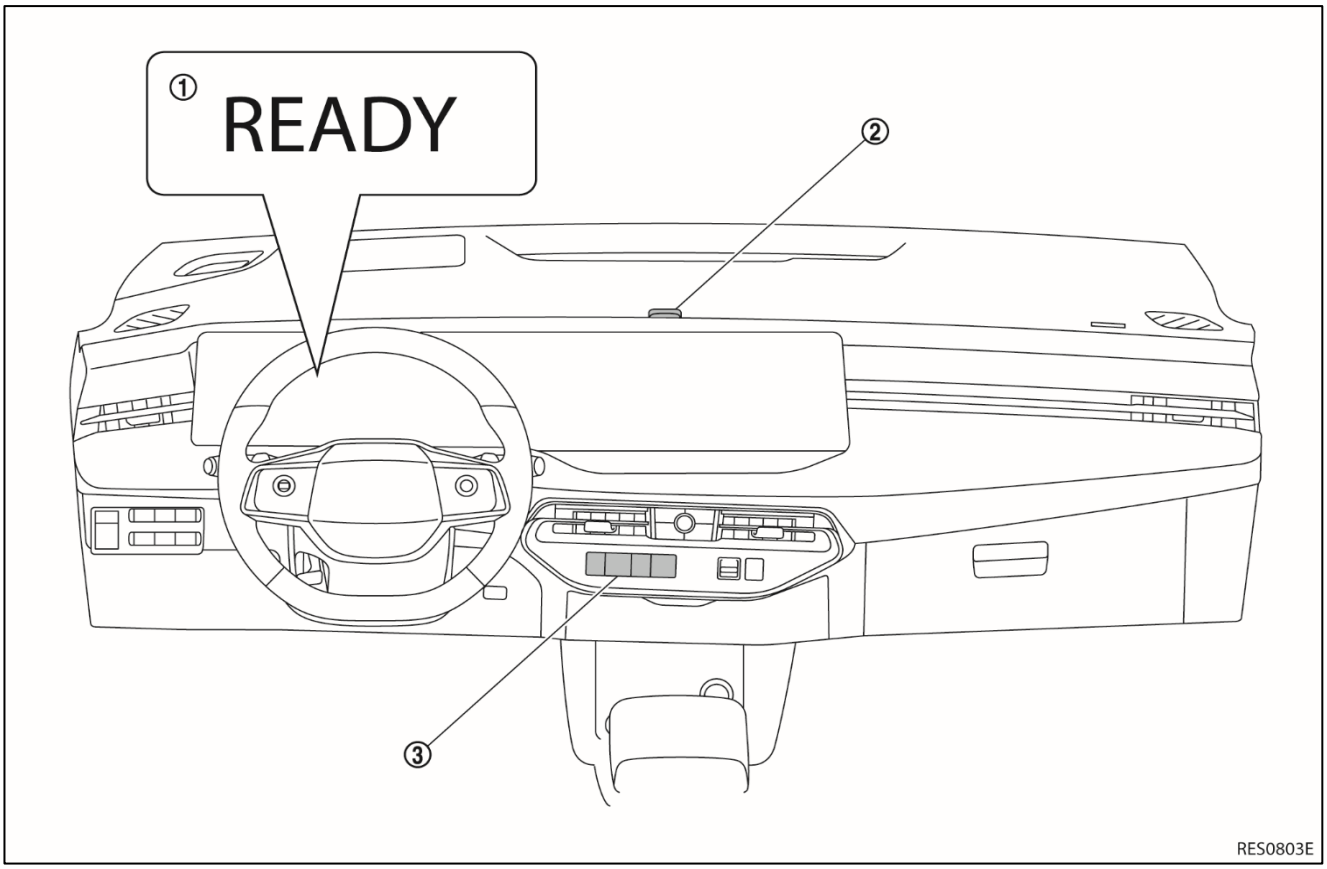


: Vehicle front

- No tail pipe.
- Plastic shields cover entire under side.
- No exhaust system components.

1-1.2 Interior Component Location

Interior components referenced in this manual are as follows:



1. READY indicator
2. Charging status indicator
3. Shift buttons

1-1.3 Vehicle Identification Number (VIN) Layout

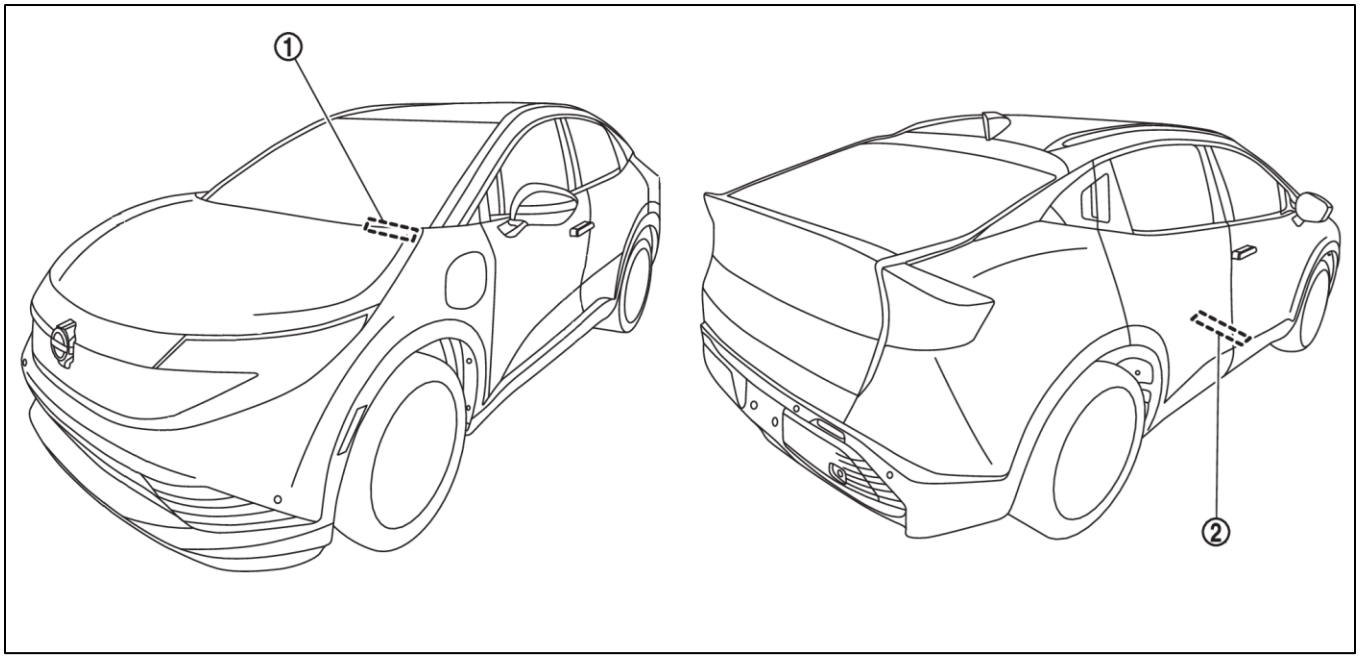
The vehicle identification number can be located as follows:
Example VIN: SJN**ZE2**T**A**XU0000000 or SJN**ZE2**T**B**XU0000000

The High-voltage battery type is identified by the 8th alphanumeric character: **A – 75KWH**

The High-voltage battery type is identified by the 8th alphanumeric character: **B – 52KWH**

The LEAF is identified by the 4th ,5th and 6th alphanumeric character: **ZE2**

ZE2 = Model code



1. VIN plate (visible through windshield)
2. Vehicle identification number (Chassis number)*

Note:- *on the front right floor area, under a plastic covering

1-1.4 Warning and Indicator Lamp Information

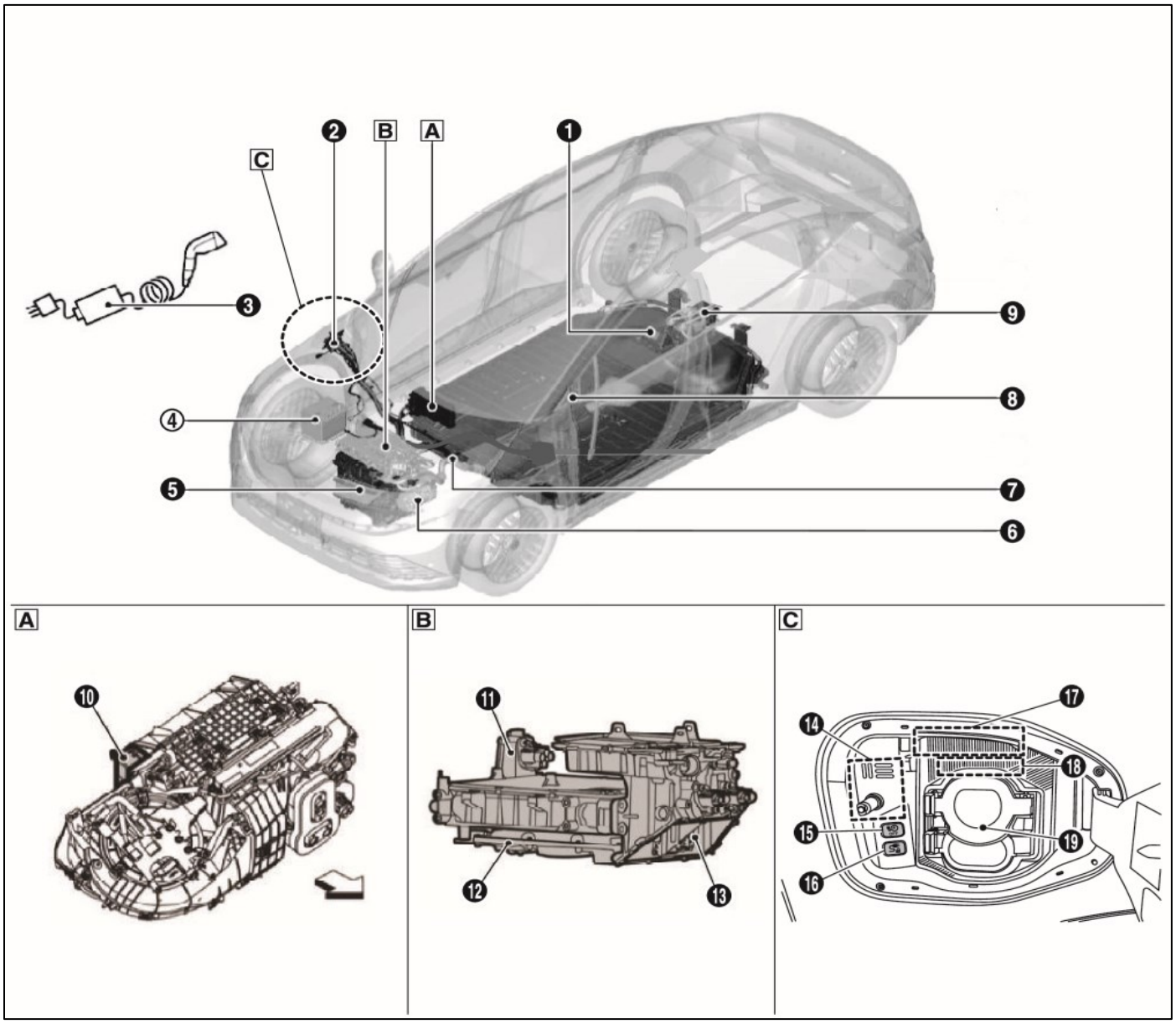
The following warning and indicator lamps are located in the instrument cluster.

Lamp Name	Icon	Description
READY Indicator		This lamp is on when the EV system is powered up and the vehicle is ready to drive.
EV System Warning Lamp*1		• Malfunction has occurred in the EV system and/or • Emergency shut-off system has been activated. The shut-off system activates in the following conditions: – Front and side collisions in which the air bags are deployed. – Certain rear collisions. – Certain EV system malfunctions.

Master Warning Lamp (RED)		This lamp is on when another red warning lamp is displayed in the instrument cluster or a warning is displayed on the vehicle information display.
Master Warning Lamp (YELLOW)		This lamp is on when: • High-voltage battery is getting low on charge. • A yellow warning lamp is displayed in the instrument cluster or a message is displayed on the vehicle information display.

*1: The READY indicator light will turn off in certain EV system malfunctions.

1-1.5 High-Voltage-Related and 12-volt-Related Component Locations and Descriptions



⇦ : Vehicle front.

NOTE:

Components with white number in black background are high-voltage components.

No.	Component	Location	Description
❶	Service plug	Under rear seat	Isolates the battery from the rest of the high-voltage electrical system.
❷	• Quick charge port • Normal charge port	a) Vehicle right side for Left hand drive (LHD). b) Vehicle left side for Right hand drive (RHD).	• Connection port for quick charge cable. Quick charging charges the high-voltage battery directly from the quick charge port. • Connection port for normal charge cable (EVSE). EVSE: (Electric Vehicle Supply Equipment). Normal charging charges the high-voltage battery via the on-board charger from the normal charge port.
❸	Charge cable & charge connector	Charge port	Used when charging high-voltage batteries. Connect the charging connector at the end of the charging cable to the connection port of the charging port.
④	12-volt battery	Motor room	A lead-acid battery that supplies power to the low voltage devices.
❺	Electric powertrain assembly	Motor room	Inverter: Converts the DC power stored in the high voltage battery to three-phase AC power and controls motor torque (revolution) by regulating the motor current. Traction motor: Converts three-phase AC power to drive power (torque) which propels the vehicle.
❻	Electric air conditioner compressor	Motor room	Exclusive use motor operated with high voltage compresses refrigerant gas for high pressure.
❼	High-voltage cables (orange color)	Motor room and undercarriage	Orange-colored power cables carry high voltage current between each of the high voltage components.
❽	High-voltage battery	Undercarriage	Stores and outputs DC power needed to propel the vehicle. Coolant is circulated to control battery temperature.
❾	PTC battery heater (If so equipped)	Undercarriage	A dedicated heater that operates at high voltage and heats the coolant for the high-voltage battery.
❿	PTC cabin heater	Built in A/C unit in the instrument panel	A dedicated heater that operates at high voltage heats the air for heating. PTC: (Positive Temperature Coefficient)
⓫	On-board charger	Motor room	During normal charging, power from a household outlet is converted from single-phase AC to DC, the voltage is increased, and the high-voltage battery is charged. When using the V2L system, power from the high-voltage battery is converted from DC to AC and output via the VLC (vehicle load connector), allowing the use of household appliances and other devices outside the

			vehicle.
⓬	DC/DC converter	Motor room	The DC/DC converter reduces the voltage of the high-voltage battery to provide power to the 12-volt battery.
⓭	High voltage junction box	Motor room	The high-voltage junction box provides electric power from the high-voltage battery to all high-voltage parts of the vehicle.
⓮	Charge port lid actuator	a) Vehicle right side for Left hand drive (LHD). b) Vehicle left side for Right hand drive (RHD).	Automatically open and close the charge port door.
⓯	Immediate charging switch	a) Vehicle right side for Left hand drive (LHD). b) Vehicle left side for Right hand drive (RHD).	Start charging immediately when connected to a charging source
⓰	Charge connectors unlock switch	a) Vehicle right side for Left hand drive (LHD). b) Vehicle left side for Right hand drive (RHD).	Allow the user to release the charging connector safely from vehicle.
⓱	Charge port light	a) Vehicle right side for Left hand drive (LHD). b) Vehicle left side for Right hand drive (RHD).	To see the charging status in low light area.
⓲	Charge connector lock actuator	a) Vehicle right side for Left hand drive (LHD). b) Vehicle left side for Right hand drive (RHD).	Secure the charging cable during a charging session and ensure safe and controlled disconnection.
⓳	Charge port	a) Vehicle right side for Left hand drive (LHD). b) Vehicle left side for Right hand drive (RHD).	Connection port for normal charge cable (EVSE). EVSE: (Electric Vehicle Supply Equipment). Normal charging charges the high-voltage battery via the on-board charger from the normal charge port.

High-Voltage Battery Pack Specifications-Battery 52KWH

High-voltage battery voltage	353 V
Number of high-voltage battery modules in the pack	5
High-voltage battery dimensions	1973.2 x 1456 x 357.7 mm (77.68 x 57.32 x 14.08 in).
High-voltage battery weight	371.4kg (818.8lb)

High-Voltage Battery Pack Specifications-Battery 75KWH

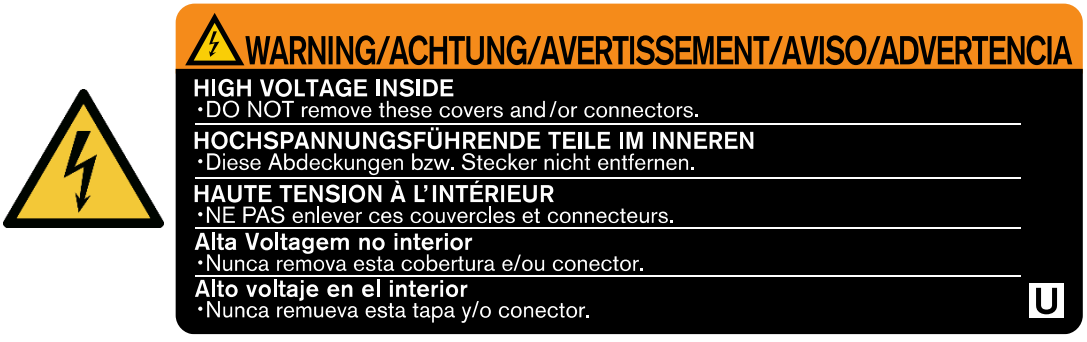
High-voltage battery voltage	372 V
Number of high-voltage battery modules in the pack	7
High-voltage battery dimensions	1973.2 x 1456 x 357.7 mm (77.68 x 57.32 x 14.08 in).
High-voltage battery weight	464.2kg (1023.4lb)

1-1.6 High-Voltage Safety Measures

Circuit insulation	The high-voltage positive (+) and negative (-) circuits are insulated from the metal chassis.
Reducing the risk of electrocution	The high-voltage components and harnesses have insulated cases or orange-colored coverings which provide insulation and easy identification. The high-voltage battery case is electrically connected to the vehicle ground. This connection helps protect the vehicle occupants and emergency responders from high-voltage electrical shock.
Identification	The high-voltage components are labeled “WARNING” similar to the label shown below. All high-voltage harnesses are coated in orange.

Warning Labels

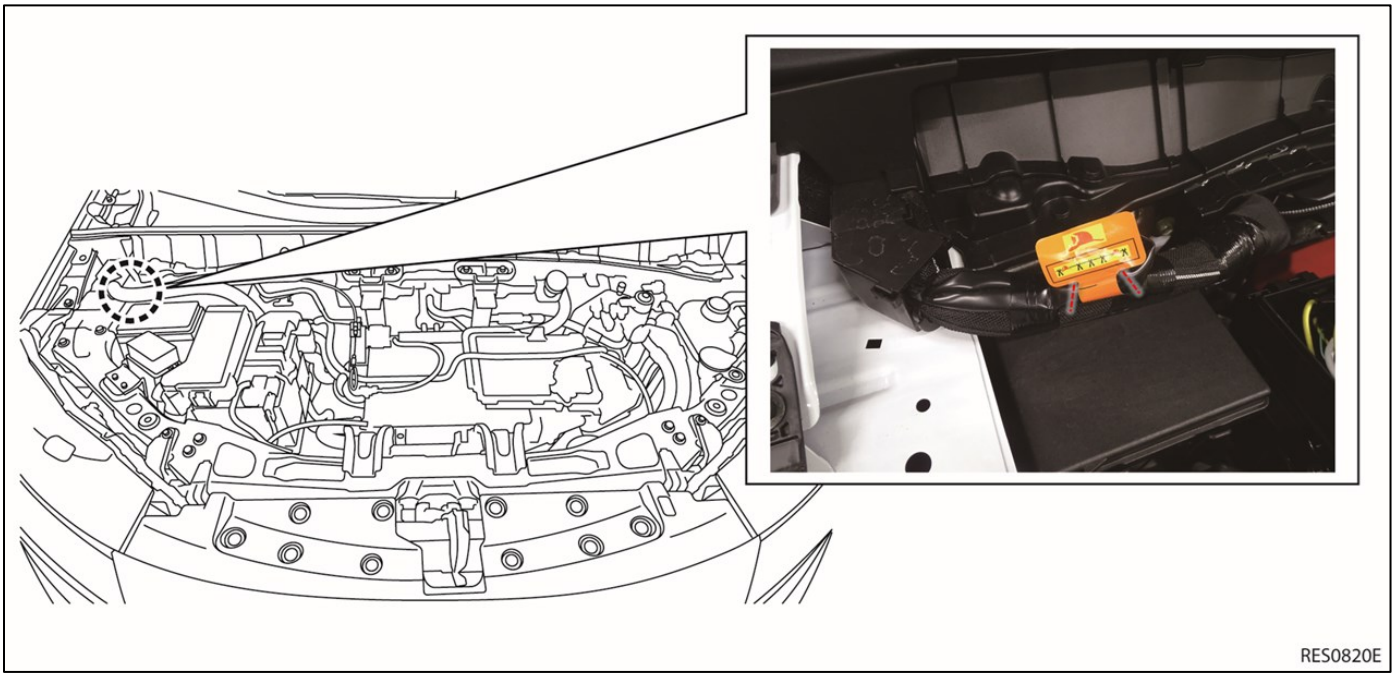
The following warning label is applied to the high voltage junction box located under hood.



The following warning label is applied to the service plug access cover located under the rear seat cushion flap.

The following warning label is applied to the high-voltage battery located on the vehicle's undercarriage.

The following warning label is applied to a low voltage harness which can be cut to disable the High Voltage powertrain.



Cut off both ends of the first responder label located on the left side of the motor room when viewed from the front of the vehicle.

1-1.7 High-Voltage Circuit Shut-Off System

The high voltage can be shut off by the following methods:

Service plug	Positioned in the center area of the high-voltage battery, this shuts off output high-voltage when manually removed.
System main relay (located in high-voltage battery)	Controlled by the power switch, this relay, which is controlled by the 12-volt system, shuts off the high-voltage from the high-voltage battery.
Emergency shut-off system	In the case of a collision (front and side collisions in which the air bags are deployed, certain rear collisions) or certain system malfunctions this system is designed to shut off the high-voltage from the high-voltage battery.
Charging connector	Some of the high-voltage components are activated during charging. Remove the charging connector to deactivate these components.
Cut out loop in engine bay	Cut off both ends of the first responder label located on the left side of the motor room when viewed from the front of the vehicle

1-1.8 Preventing Electrical Shock

1. If it is necessary to touch any of the high-voltage harnesses or components, you must always wear appropriate Personal Protective Equipment (PPE) (refer to 8-2.2 Preparation Items (ERG-55) and shut off the high-voltage system by referring to 3-2.3 Powering Down the High-voltage System (ERG-20)
2. To avoid the risk of electrocution, NEVER touch the inside of the high-voltage battery unless appropriate PPE is worn even after shutting off the high-voltage system. The high-voltage battery maintains charge even though the high-voltage system is shut down.
3. Cover any damaged high-voltage components with insulated tape.

1-1.9 Emergency Medical Equipment

The high-voltage system should not interfere with emergency medical equipment which must be used in or near the vehicle at an accident scene.

2. Immobilization / Stabilization / Lifting

2-1 Emergency Response Steps

⚠ DANGER

⚠ Failure to properly shut down the high-voltage electrical system before the Emergency Response Procedures are performed will result in serious injury or death from electrical shock. To prevent serious injury or death, NEVER touch high-voltage harnesses or components without always wearing appropriate Personal Protective Equipment (PPE).

⚠ It is necessary to touch any of the high-voltage harnesses or components you must always wear appropriate PPE to avoid electrical shock. Shut down the high-voltage system by following the steps outlined in 3-2.3 Powering Down the High-voltage System (ERG-20) Wait at least ten (10) minutes for complete discharge of the high-voltage capacitor after the high-voltage system has been shut down.

⚠WARNING

- **NEVER assume the LEAF is shut OFF simply because it is quiet.**
- **If the READY indicator or charging indicator are ON, the high-voltage system is active.**
- **If possible, be sure to verify that the READY indicator on the instrument cluster is OFF and the high-voltage system is stopped.**
- **Some of the under-hood parts get hot and may cause serious burns. Use caution when working on or around these parts.**

2.2 Preparation items

Preparation Items	Specification	Purpose
Personal Protective Equipment (PPE): Insulated gloves 	Up to 1,000V	For protection from high-voltage electrical shock
Insulated shoes 	–	
Safety shield 	–	
Leather gloves 	Must be able to fasten tight around the wrist (worn over insulated gloves).	To protect insulated gloves
Wrenches 	Size: Varied	To remove the battery and associated parts
Solvent resistant protection gloves	–	To utilize in the event of a high-voltage battery electrolytic solution leak.
Solvent resistant protection shoes	–	
Absorbent pad	The same pad used for internal combustion engine fluids can be used.	To absorb any high-voltage battery electrolytic solution leakage.
Standard fire fighting equipment	Standard fire fighting equipment Depending on type of fire (vehicle or battery) use standard fire fighting equipment (water or extinguisher).	To extinguish a fire.

Insulated tape	Insulating	To cover any damaged harnesses to protect from and prevent electrical shock. Tape should cover all bare or damaged wire.

2-2.1 Personal Protective Equipment (PPE) Protective Wear Control

Perform an inspection of the Personal Protective Equipment (PPE) items before beginning work. Do not use any damaged PPE items.

2-2.2 Daily Inspection

This inspection is performed before and after use. The responder who will be using the items should perform the inspection and check for deterioration and damage.

- Insulated rubber gloves should be inspected for scratches, holes and tears. (Visual check and air leakage test)
- Insulated safety boots should be inspected for holes, damage, nails, metal pieces, wear or other problems on the soles. (Visual check)
- Insulated rubber sheet should be inspected for tears. (Visual check)

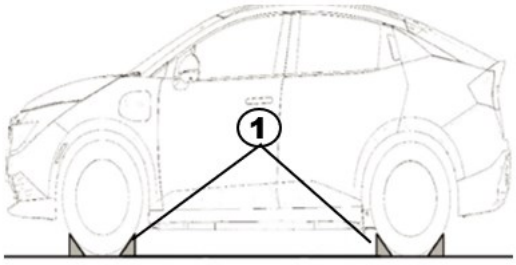
2-2.3 Insulated Tools

When performing work at locations where high voltage is applied (such as terminals), use insulated tools meeting 1,000V/300A specifications.

2-3 Vehicle Immobilization and Stabilization

If possible, immobilize the vehicle by turning the 12V system OFF and stabilize it with a wheel chock(s)

1. Block wheels
2. Apply parking brake
3. Push P button



First Responders:

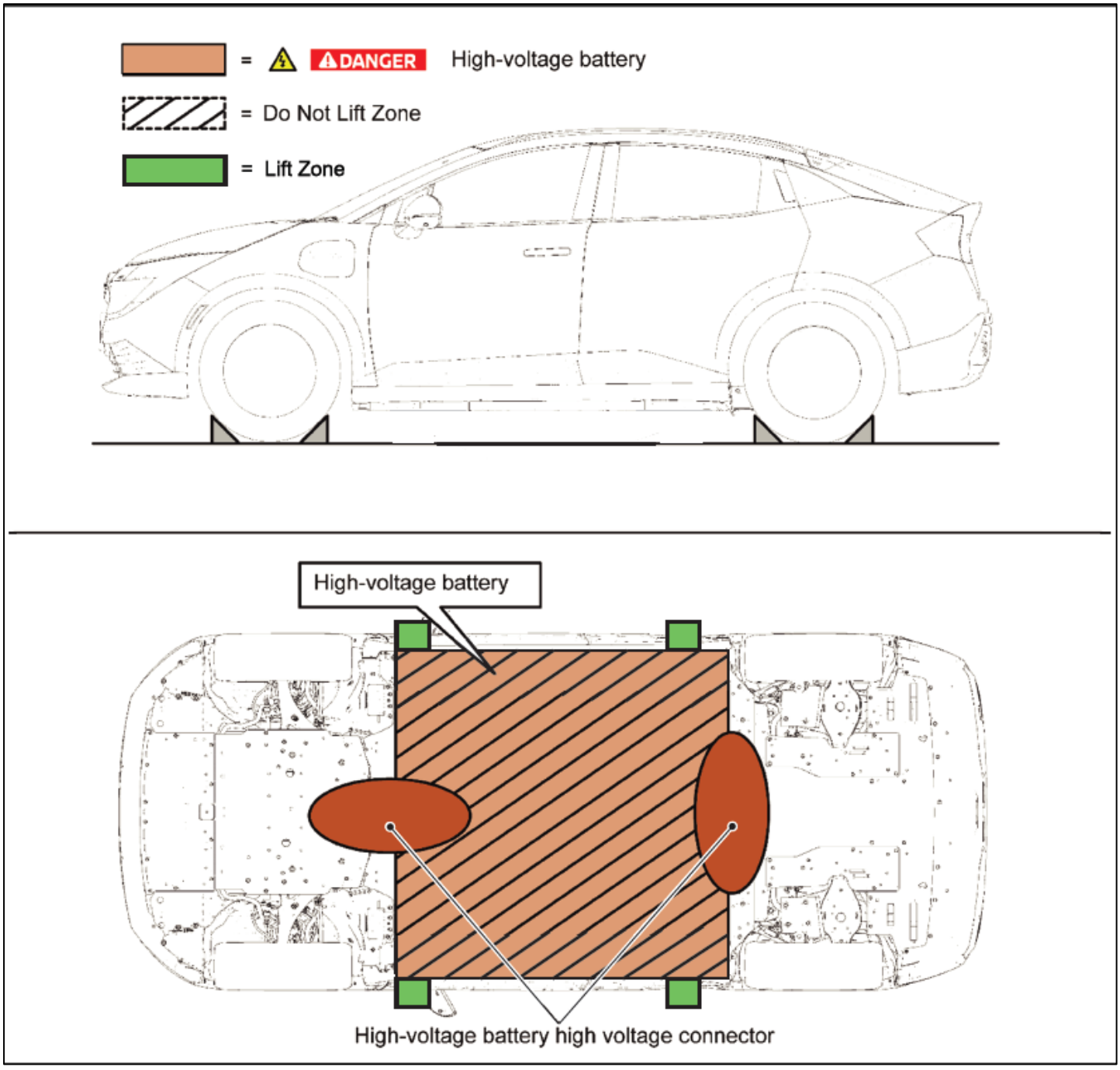
- Stabilize the vehicle with cribbing, by removing air from the tires, or utilize the Lift Airbag Equipment for rescue.

Dismantlers/Roadside Assistance Workers:

- Stabilize the vehicle with wooden blocks or by removing air from the tires.

⚠WARNING

- **Do not stabilize the vehicle with cribbing under the high-voltage battery.**
- **To avoid electrical shock, do not put the Lift Airbag Equipment for rescue and wheel chock(s) under the high-voltage components and harnesses as shown following.**


= DANGER High-voltage battery
= Do Not Lift Zone
= Lift Zone
High-voltage battery
High-voltage battery high voltage connector

3. Disable Direct Hazards / Safety Regulations

3-1 How to Handle a Damaged Vehicle at an Accident Scene

If the operation is needed for the following systems, please operate them before battery disconnection.

- Door lock
- Power window
- Power seat
- Power back door
- Electric parking brake

NOTE:

If any air bags have deployed in the following 3 situations, the high-voltage (HV) system has been designed to automatically shut off at the time of deployment.

The LEAF high-voltage system incorporates capacitors which are energized whenever the high-voltage system is on. If the high-voltage system is shut down (either through one of the built-in automatic mechanisms or manually through one of the procedures explained in this ERG), the capacitors will begin to gradually discharge. After 5 minutes, the voltage level will have dropped below 60V, and **complete discharge requires approximately 10 minutes after high-voltage system shut down**. It is within this period of time that responders must be most cautious.

When arriving to an incident involving an LEAF, the vehicle should be approached with caution and inspected for the level of damage. In addition to overall vehicle condition (location and severity of body damage, air bag deployment, etc.), the high-voltage system should be assessed specifically. The locations of the high-voltage component parts are illustrated in this ERG. Refer to 1-1.5 High-Voltage-Related and 12-volt-Related Component Locations and Descriptions (ERG–06). Appropriate Personal Protective Equipment (PPE) must always be worn when approaching a vehicle of unknown condition, as described in this ERG.

Situation 1) High-voltage system intact, occupants can be accessed without extrication tools

The HV system can be shut down by following the procedures in this guide, while wearing appropriate PPE. After HV system shut down, occupant assistance can begin immediately, and no wait period is necessary.

Situation 2) High-voltage system intact, occupants cannot be accessed without extrication tools

The HV system can be shut down by following the procedure in this guide, while wearing appropriate PPE. After HV system shut down, absolute care must be taken not to cut through or damage any HV system wiring, battery or components within **ten (10) minutes of HV system shut down**, but occupant assistance operations using extrication equipment can begin immediately. The locations of the HV components are illustrated in this guide.

Situation 3) High-voltage (HV) system damaged

If there is any evidence that the HV system has been compromised (such as arcing/sparking, orange wiring harnesses cut or damaged, HV component casings damaged, etc.), the responder may still be at risk of high-voltage exposure. The vehicle must be approached with extreme caution prior to initiating any system shut down procedures or rendering assistance to occupants. Appropriate PPE must always be worn as described in this guide, and the **ten (10) minute wait time must be observed after HV system shut down** in order to ensure the system is de-energized.

In rare situations where vehicle damage is very severe, HV system shut down procedures as described in this guide may not work. In these instances, extreme caution and appropriate risk management must be followed to prevent shock or electrocution to the responder or occupant.

3-2 High-voltage System Shut-Down Procedures

Any of the following procedures can shut down and isolate the high-voltage system. The first response operation should only begin after shutting down the high-voltage system. If the vehicle is heavily damaged, for example the high-voltage battery is deformed, broken or cracked, appropriate Personal Protective Equipment (PPE) must always be used, and the high-voltage battery and high-voltage components must not be touched.

⚠ DANGER

- **⚠ Failure to properly shut down the high-voltage system before the Emergency Response Procedures are performed will result in serious injury or death from electrical shock. To prevent serious injury or death, NEVER touch high-voltage harnesses or components without always wearing appropriate Personal Protective Equipment (PPE). PPE must always be worn when touching or working on high-voltage components.**
- **⚠ When contact with high-voltage components or high-voltage harnesses is unavoidable, or when there is risk of such contact, you must always wear appropriate PPE. PPE must always be worn when touching or working on high-voltage components.**

⚠WARNING

- ⚠ If the charge connector is connected to the vehicle, remove it. Refer to 3-2.1 Removing the Charge Connector (ERG–18).
- ⚠ The vehicle contains parts that contain powerful magnets. If a person who is wearing a pacemaker or other medical device is close to these parts, the medical device may be affected by the magnets. Such persons must not perform work on the vehicle.
- ⚠ Be sure to verify that the READY indicator is off and the high-voltage system is stopped.
- ⚠ After the high-voltage system is shut down, please wait at least ten (10) minutes for complete discharge of the high-voltage capacitor. While waiting, do not operate any vehicle functions.

NOTE:

The high-voltage full discharge takes ten (10) minutes, but after five (5) minutes the voltage has dropped below 60V.

- ⚠ After shutting down the high-voltage system and removing the 12-volt battery negative (-) terminal, wait at least three (3) minutes to discharge the air bag capacitor. Even though the 12-volt battery negative (-) is disconnected, the Supplemental Restraint System (SRS) air bag maintains voltage at least three (3) minutes. During this time, there is a possibility of sudden SRS air bag inflation due to harness short circuit or damage and it may cause serious injuries.
- ⚠ Always shut down the high-voltage system before disconnecting the 12-volt battery. Not doing so may result in serious injury or death from electrical shock.
- ⚠ The 12V system will remain active even after the 12-volt battery negative (-) terminal is removed while the high-voltage system is active. The high-voltage system is active during any of the following conditions:

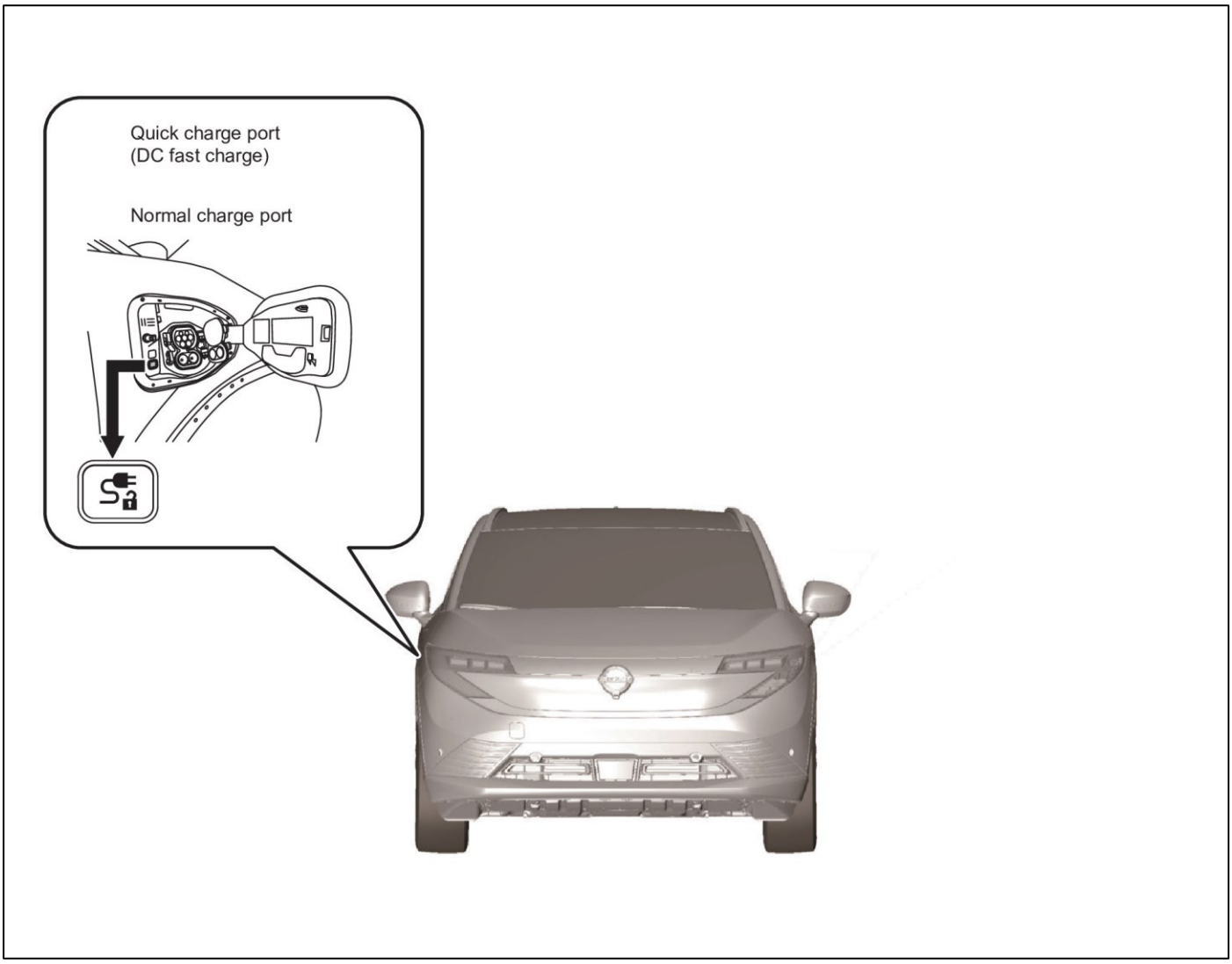
– charging indicator is turned ON

– READY indicator is turned ON

Refer to 1-1.2 Interior Component Location (ERG–7) for location of these indicators. This is because DC/DC converter will not shut down and power will be supplied to the 12V system and high-voltage system continuously.

3-2.1 Removing the Charge Connector

Press the charge connector unlock switch to unlock the charge connector.

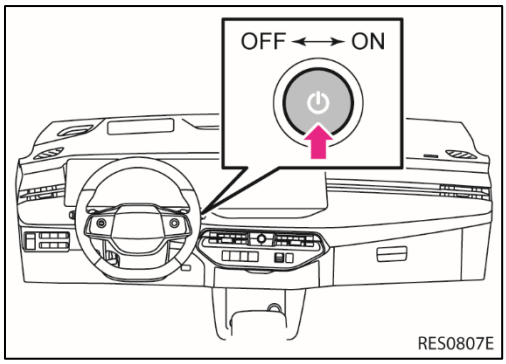


NOTE:

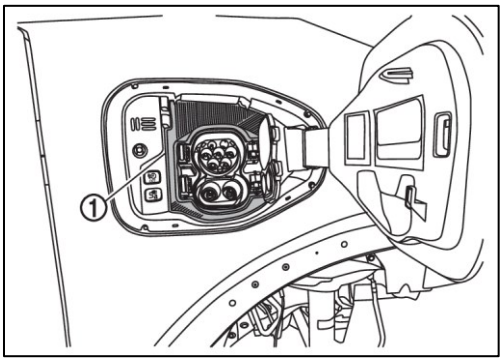
- **If the Nissan Intelligent Key® is not carried, operating the switch will not unlock the connector.**
- **Depending on the charging station, the lock mechanism established by local standards may not be compatible with the vehicle. It may not be possible for the charge connector to lock to the vehicle**

1. **If the trickle and charge connector cannot unlock**

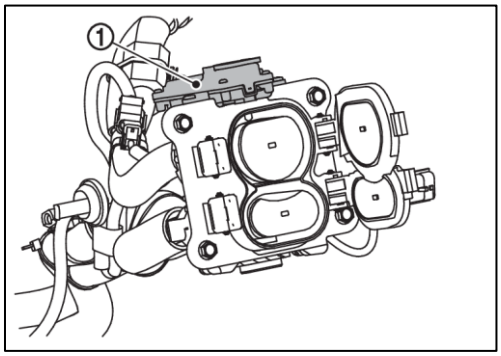
   a. Place power switch in OFF position.



   b. Break and remove charge port cover (**1**).

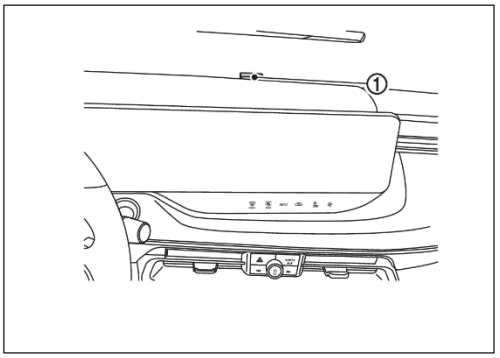


   c. Operate the lever (white) of the charge connector lock actuator (**1**) located at the top of the charge port toward the rear of the vehicle.



3-2.2 Indications the High-voltage System is ON

1. If the READY indicator is ON, the high-voltage system is active.
2. The high voltage system is active if any charging status indicator (1) is ON (LED on top of the instrument panel).



Before disconnecting the 12-volt battery terminal, if necessary, lower the windows, unlock the doors, and open the rear hatch as required. Once 12-volt battery is disconnected, power controls will not operate.

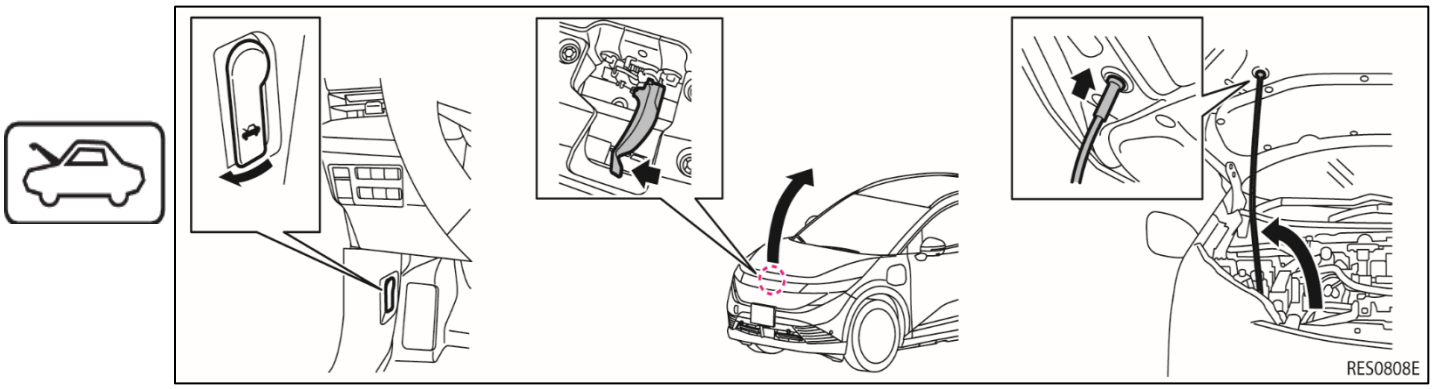
3-2.3 Powering Down the High-voltage System

The high-voltage system can be shut down with any 1 of the following procedures:

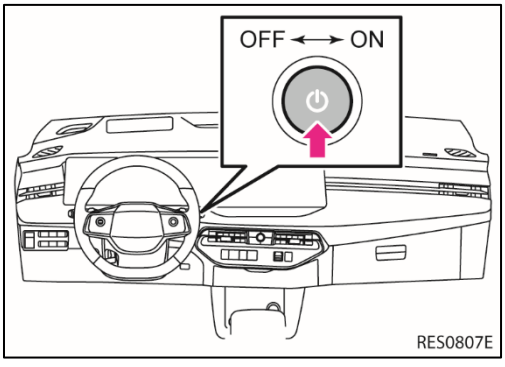
- Turn OFF the power switch **and** disconnect the 12-volt battery. Refer to 3-2.4 Primary Procedure (ERG–20).
- When the power switch cannot be operated due to vehicle damage. Refer to 3-2.5 Alternate Procedure 1 (Cable cut) (ERG–22).
- Remove the service plug and disconnect the 12-volt battery. Refer to 3-2.6 Alternate Procedure 2 (Remove Service Plug) (ERG–23).

- **3-2.4 Primary Procedure**

1. Check the READY indicator in the meter and the charging status indicator on the dashboard. If the READY indicator is ON or the charging status indicator is ON or blinking, the high-voltage system is activated.
2. Open the hood.



3. Press and hold the power switch for at least 2 seconds and confirm that the READY indicator is off and the charging status indicator is off.



If the READY indicator does not turn off, refer to:

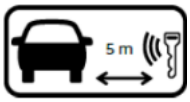
- If the hood can be opened — 3-2.5 Alternate Procedure 1 (Cable cut) (ERG–22).
- If the hood cannot be opened — 3-2.6 Alternate Procedure 2 (Remove Service Plug) (ERG–23).

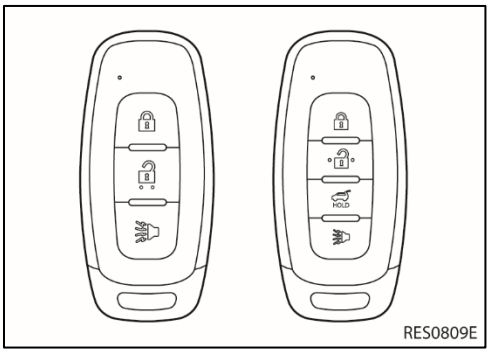
4. After performing step 3, open the driver's door, exit the vehicle, close the driver's door, and wait at least 5 minutes.

⚠ CAUTION

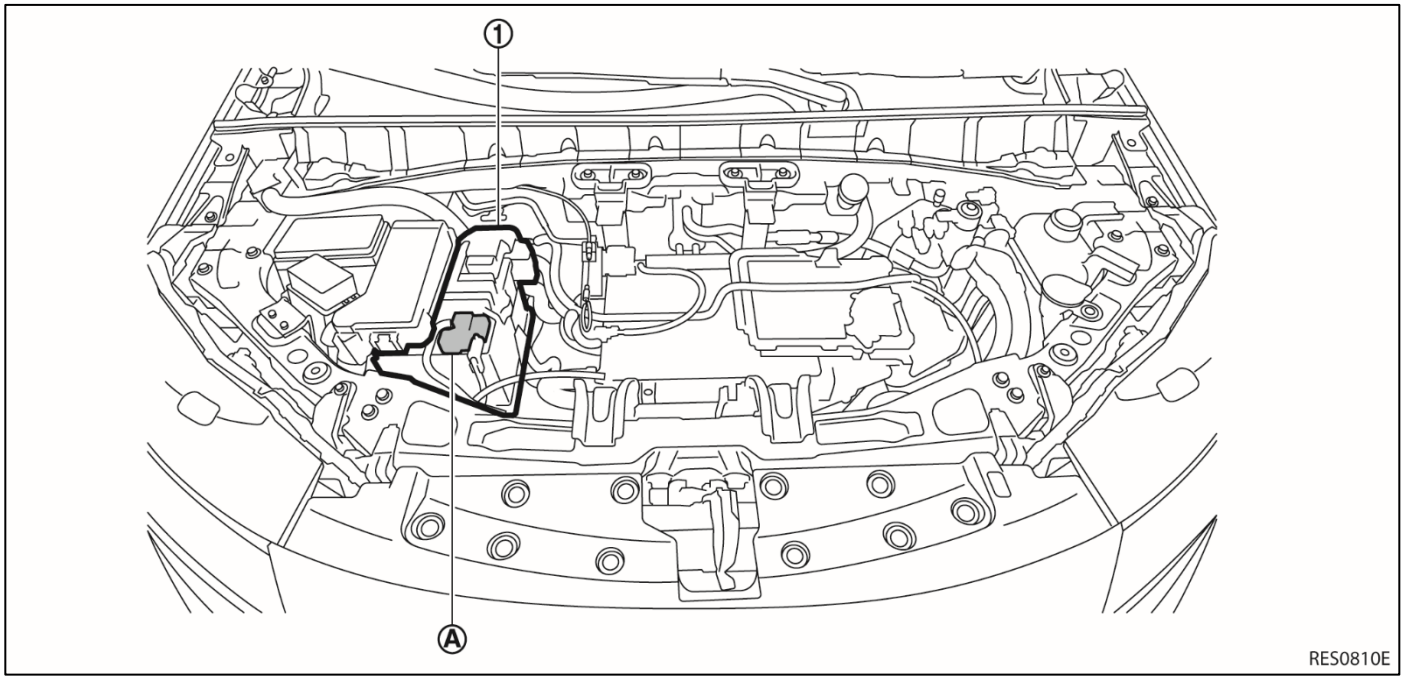
- **Since the accessory power is turned on by the auto ACC function, no vehicle operations such as operating the door locks or opening/closing the doors shall be performed during standby.**
- **If the vehicle is operated, wait at least 5 additional minutes from that point.**

5. If possible, keep the Nissan Intelligent Key® at least 5 meters (16 feet) away from the vehicle to prevent accidentally turning ON the EV system.





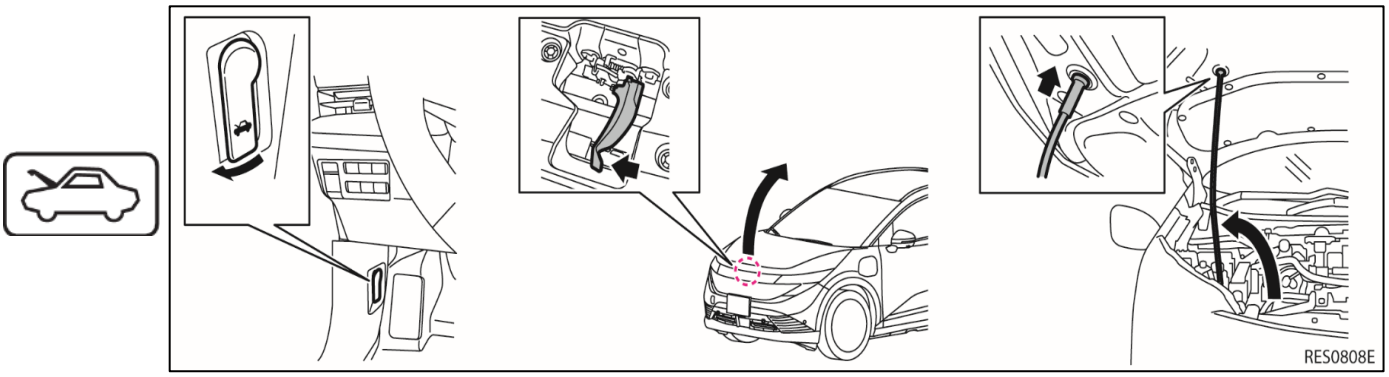
6. Disconnect the 12V battery (**1**) negative (-) cable (**A**). Insulate the negative (-) battery cable terminal with insulated tape.



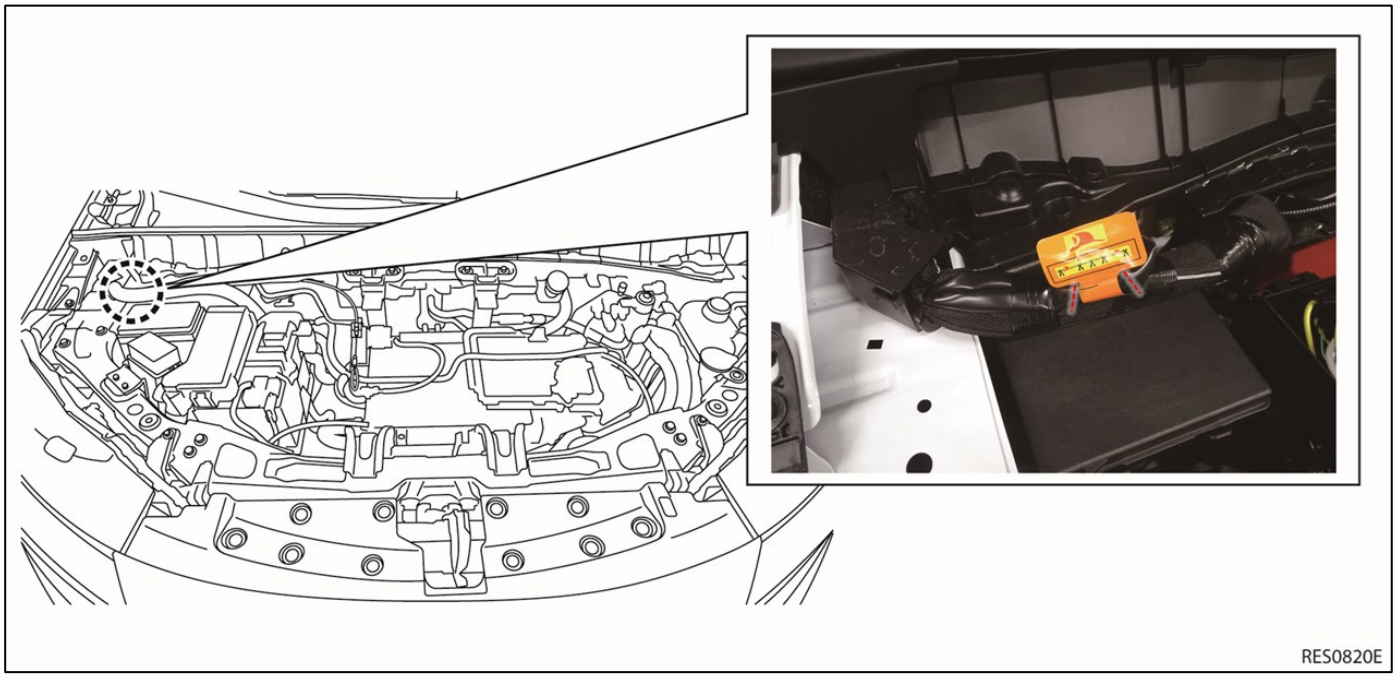
7. **Wait at least ten (10) minutes for complete discharge** of the high voltage capacitor after the power switch has been turned OFF.
8. Perform the emergency response, roadside assistance action or dismantling operation.

3-2.5 Alternate Procedure 1 (Cable cut)

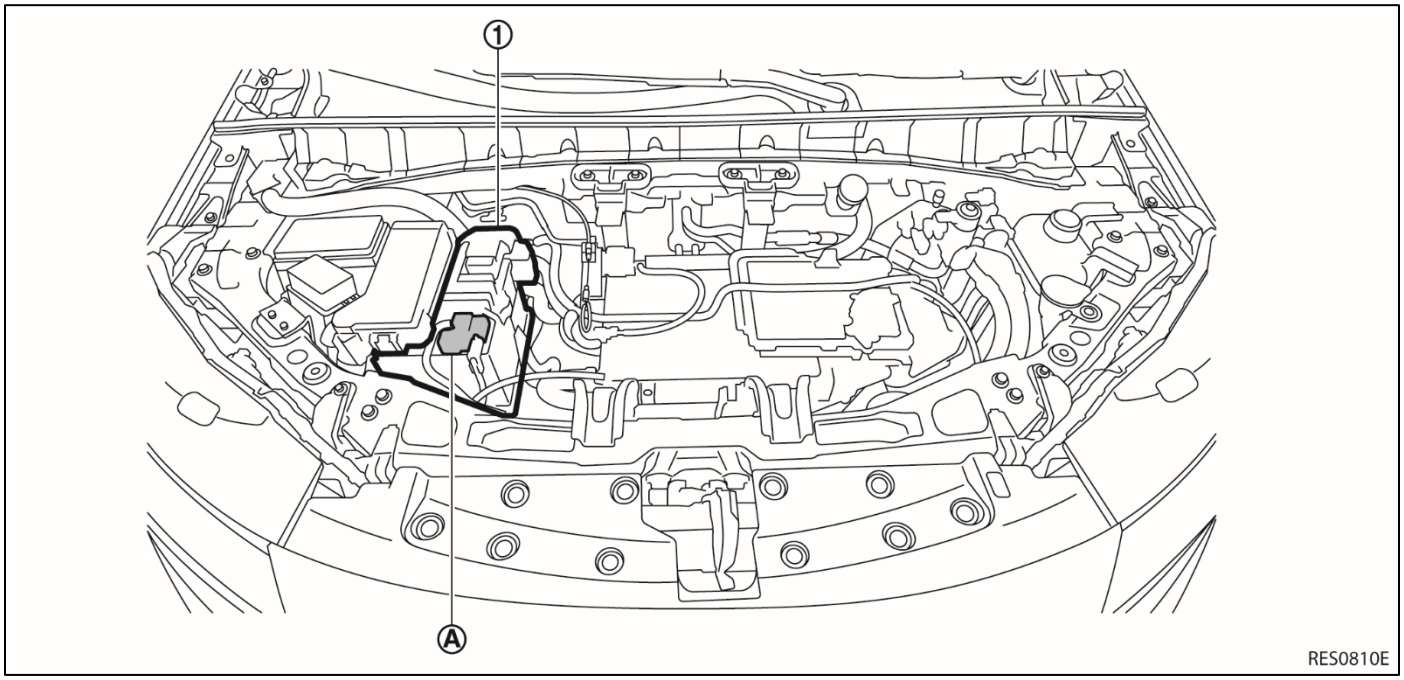
1. Open the hood.



2. Cut off both ends of the first responder label located on the left side of the motor room when viewed from the front of the vehicle.



3. Disconnect the 12V battery (1) negative (-) cable (A). Insulate the negative (-) battery cable terminal with insulated tape.



4. **Wait at least ten (10) minutes for complete discharge** of the high-voltage capacitor after the fuses are pulled.
5. Perform the emergency response, roadside assistance action or dismantling operation.

3-2.6 Alternate Procedure 2 (Remove Service Plug)

⚠DANGER

- **⚠ Do not remove the service plug without always wearing appropriate Personal Protective Equipment (PPE) to help protect the responder from serious injury or death by electrical shock.**
- **⚠ Immediately cover the service plug socket with insulated tape. The high- voltage battery retains high-voltage power even when the service plug is removed. To avoid electric shock, NEVER touch the terminals inside the socket.**

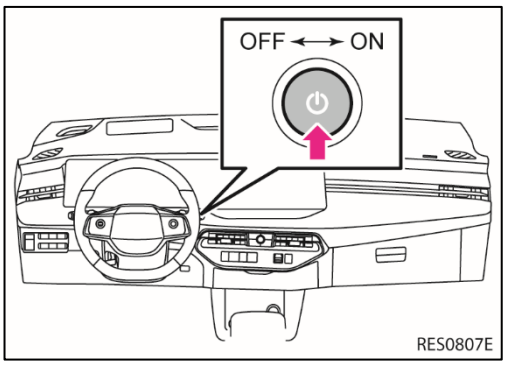
⚠WARNING

To avoid personal injury do not access to service plug if the following conditions exist.
• Smoke is coming from battery
• The Odor of smoke is present
Before removing the service plug, check the following:
• Confirm with infrared thermometer that battery surface and inspection hole cover temperature is lower than the surrounded ambient temperature. If an infrared thermometer is not available, you must observe the battery for more than 24 hours to confirm battery is stable before removal.
• Confirm that there is no damage to the service plug.

⚠WARNING

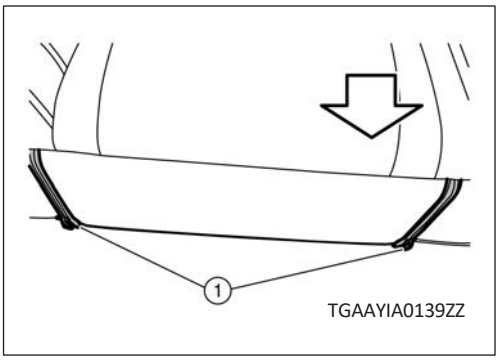
⚠To avoid unintended reinstallation and risk of electrical shock and severe personal injury or death, the rescuer should carry the service plug on his/her person while work is in progress.

1. Check the READY indicator status. If it is ON, the high-voltage system is active.
2. Place the selector lever in the Park (P) position.
3. Press the power switch once to turn OFF the high-voltage system. Then verify whether the READY indicator is OFF.



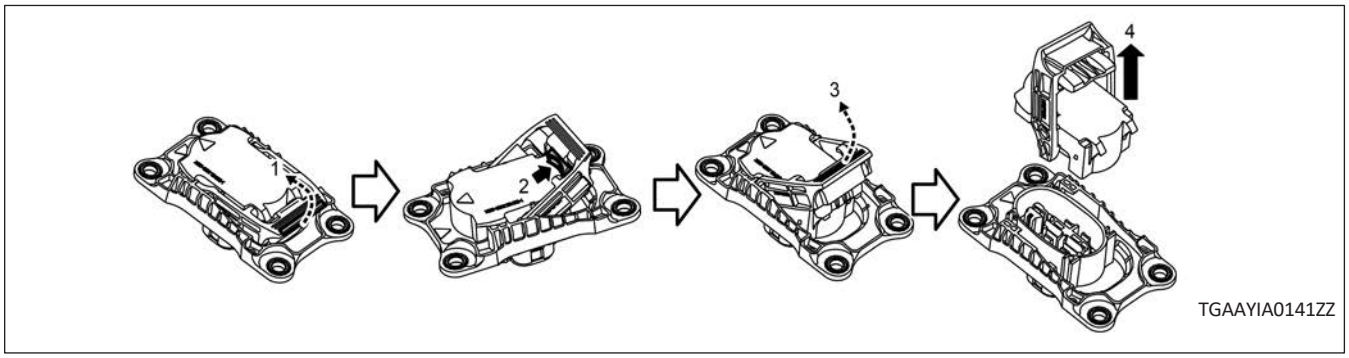
4. Open the zipper (**1**) on the lower front-facing surface of the rear center seat cushion.

   ⇦ : Vehicle front.

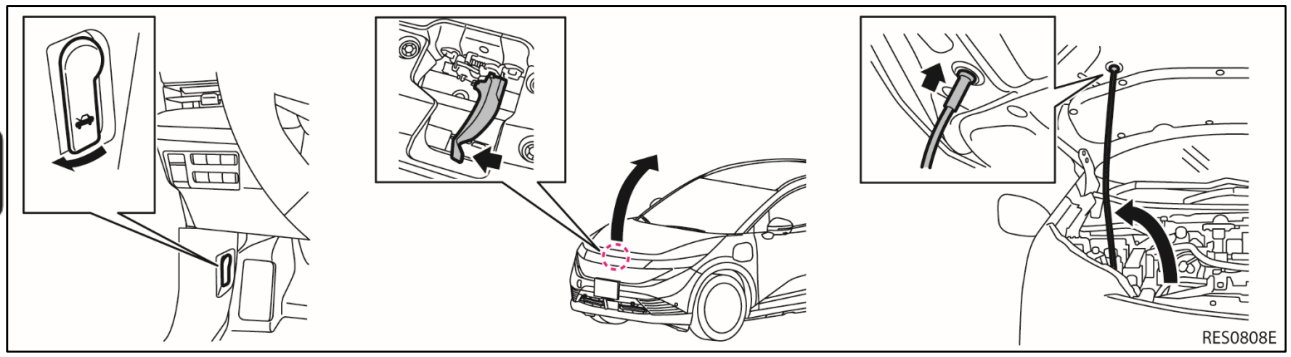


5. Remove the service plug terminal cover mounting bolt (**A**) and lift the cover upward direction and remove the service plug terminal cover.

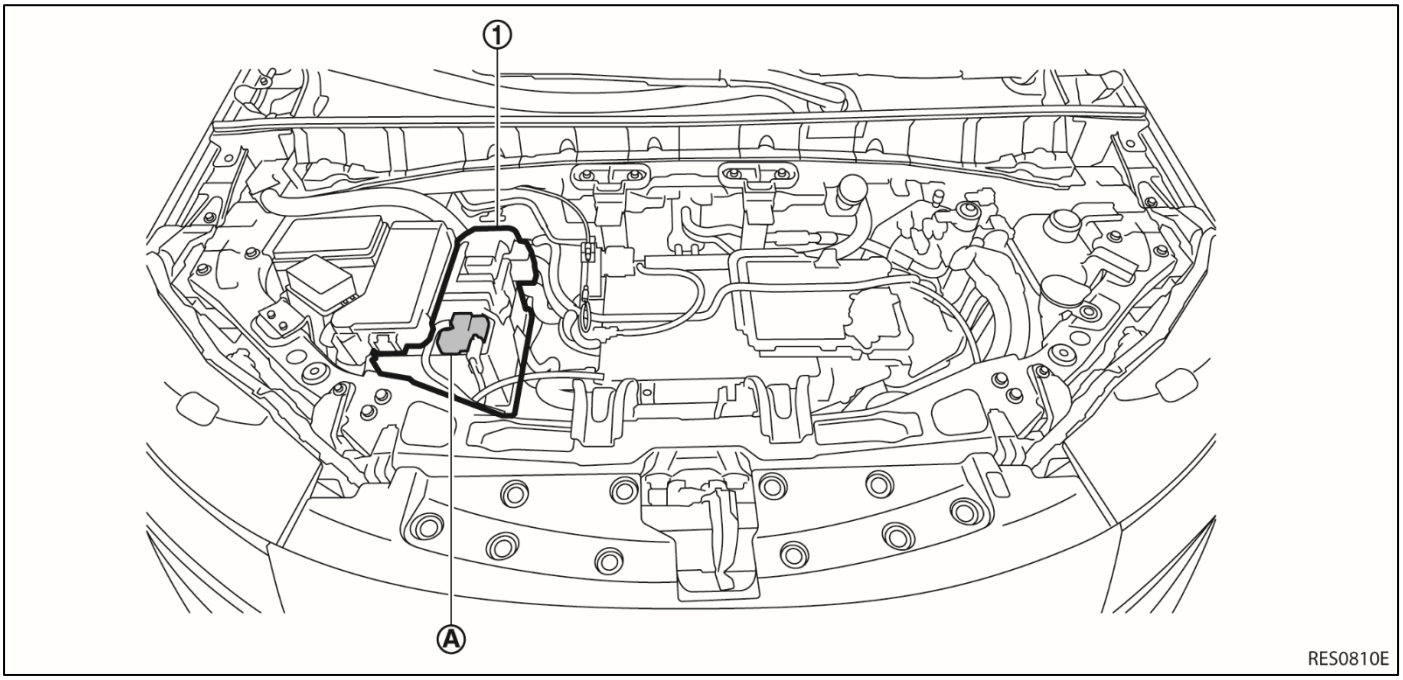
6. Remove the service plug using the following steps: (**1**) push up lever until it stops, (**2**) press pawl to unlock, (**3**) push up lever, (**4**) pull out service plug.



7. **Wait at least (10) minutes for complete discharge** of the high-voltage capacitor after the service plug has been removed.
8. Open the hood.



9. Disconnect the 12V battery (**1**) negative (-) cable (**A**). Insulate the negative (-) battery cable terminal with insulated tape.

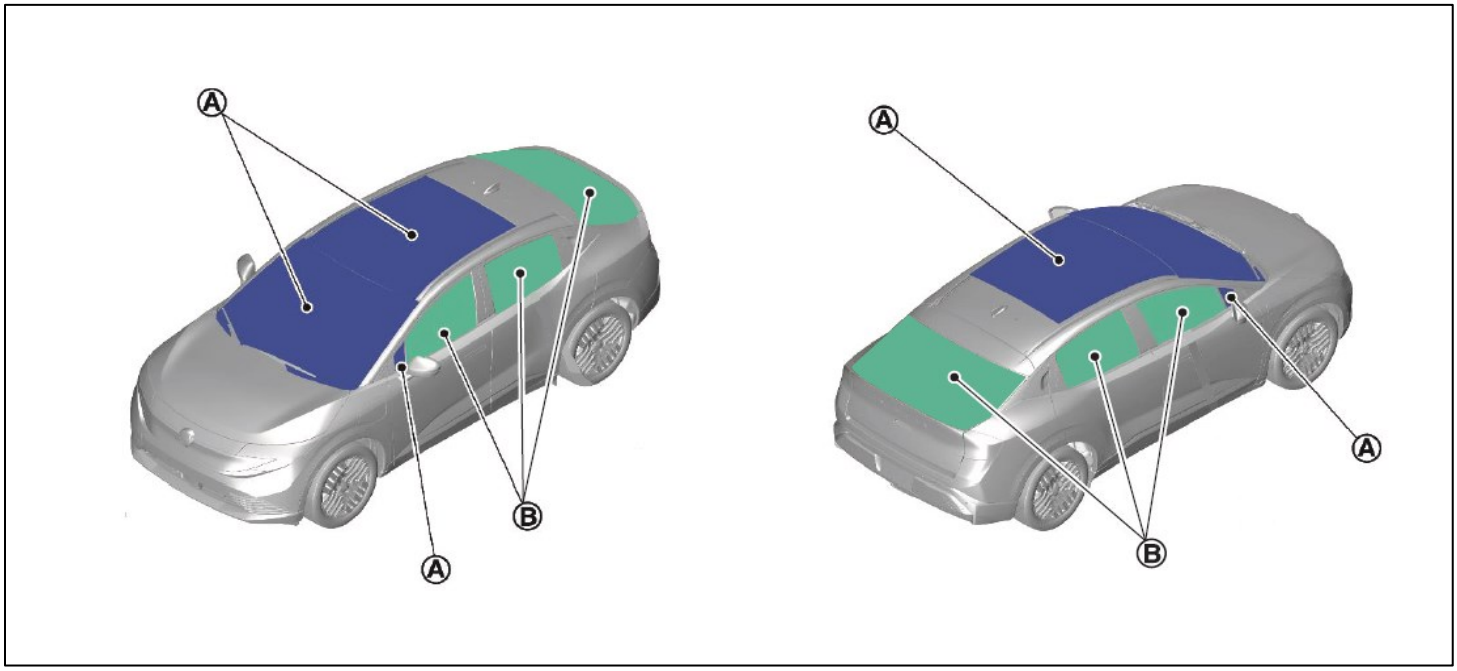


10. Perform the emergency response, roadside assistance action or dismantling operation.

4. Access to the Occupants

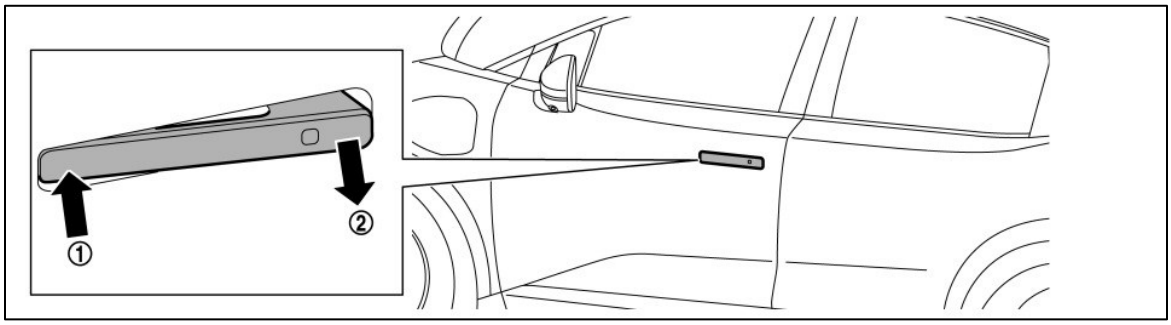
4-1 Accessing the Occupants

1. Remove windows.
   a. Perform window removal the same as a normal vehicle.



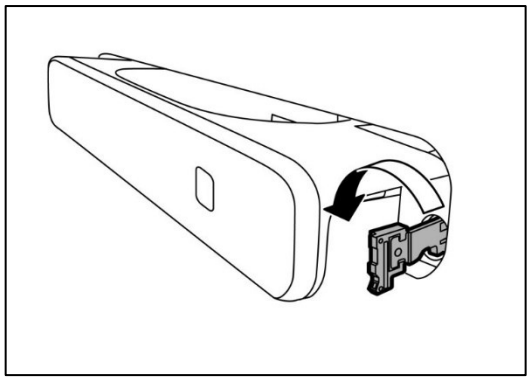
A: Laminated glass B: Tempered glass

2. Remove doors.
   a. Door:
      The doors can be opened by operating the knob or handle installed on the door.
      The doors are removable with hand tools or basic rescue tools such as electrical/hydraulic rescue tools. It may be easier to remove the doors by cutting door hinges.
   b. Flush door handle:
      If the door handle does not extend outward due to a discharged battery, the door can be unlocked the door by the following procedure.
      (1). Push the front part of the door handle of the driver's door.
      (2). Pull the door handle out from its stored position and then pull it further forward to open the door.



⚠CAUTION

If the door is locked, pull out the mechanical key from the Intelligent Key, then separate the key plate from the key head, and then insert the key plate into the key cylinder inside the flush door handle to unlock it.



c. Opening the doors from the inside:
When the doors are unlocked, they can be opened by operation the handle on the door.

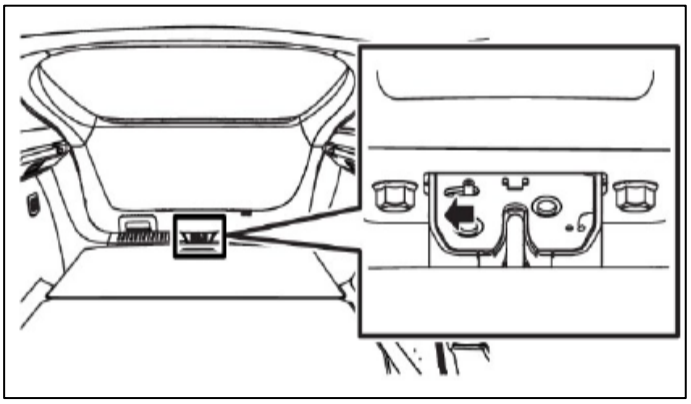
d. Opening the tailgate from the outside:
When the tailgate is unlocked, they can be opened by operation the boot switch on tailgate.

e. Opening the tailgate from the inside, when 12v power is available:
Where vehicle power is available, the tailgate can be opened from the inside using the power tailgate switch on the instrument panel by pushing the switch for more than 1 second.

f. Opening the tailgate from the inside, when 12v power is **not** available:

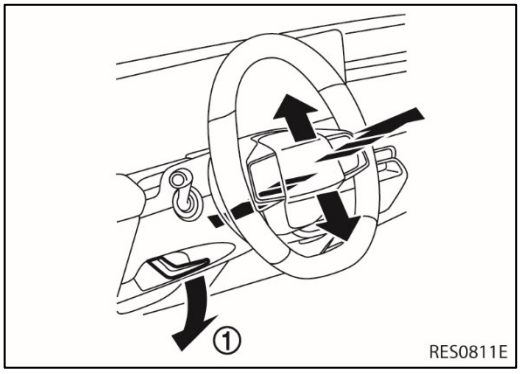
If the tailgate cannot be opened with the power door lock switch due to a discharged 12–volt battery, follow these steps:

1. Fold the rear seats down
2. Move the release lever to the left. The tailgate will be unlatched
3. Push the tailgate up to open



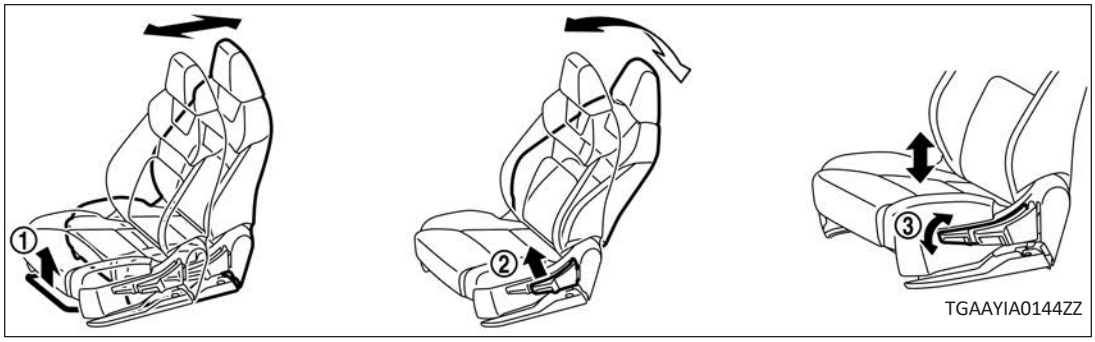
3. Adjust steering wheel (if necessary).

a. Pull the lock lever (**1**) down and adjust the steering wheel up or down, forward or rearward to the desired position. Push the lock lever up securely to lock the steering wheel in place.

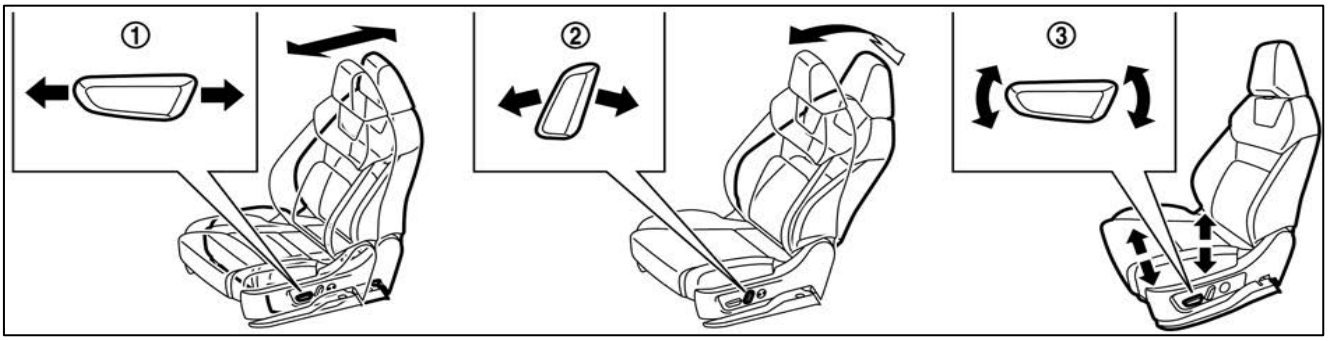


4. Adjust front seat

a. **MANUAL SEAT —** Front seat can be adjusted forward/backward manually by pulling up and holding lever (**1**), tilted forward/backward manually by pulling up and holding lever (**2**) and pull up or push down the adjusting lever (**3**) repeatedly to adjust the seat height until the preferred position is achieved.

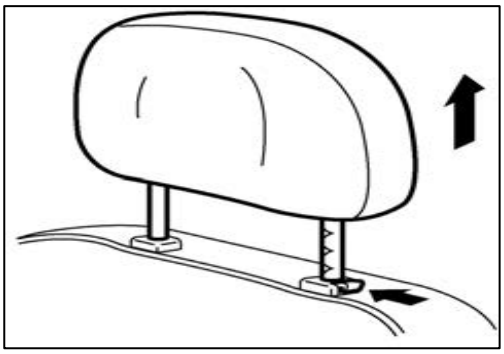


b. **POWER SEAT** — **Seat Position**: Move the seat position to forward or backward by the adjusting switch (**1**); **Seat-Back**: Move the seat-back to forward or backward by the adjusting switch (**2**); **Seat Lifter**: Move the seat height to desired position by the adjusting switch (**3**).



⚠WARNING

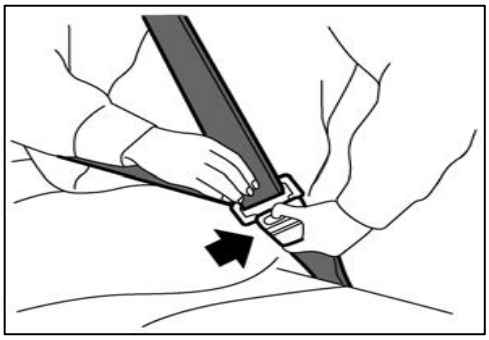
Powered functions like the windows, power seat position adjustment and electric steering wheel adjustment will be disabled when the 12V battery is disconnected.



5. Remove front seat head restraint (if necessary).

   The front seat head restraint can be removed by pressing the lock knob and pulling it up.

   Note: The front head restraints with a speaker are not designed to be pulled out.



6. Unfasten the seat belt.

   Seat belt can be unfastened by pressing the release button. If seat belt cannot be unfastened, cut it with a belt cutter.

4-2 Cutting the Vehicle Body

⚠DANGER

- **⚠ Do not cut into high-voltage related areas to avoid severe personal injury or death.**
- **⚠ Do not cut into the high-voltage battery to avoid severe personal injury or death.**
- **⚠ When removing parts, NEVER touch the high-voltage parts or the insides of the exposed, orange-colored high-voltage cables to avoid severe personal injury or death. Personal Protective Equipment (PPE) must always be worn when touching or working on high-voltage components.**

⚠WARNING

- **Do not cut air bag parts to avoid unintended deployment of the air bags and the risk of severe personal injury or death.**

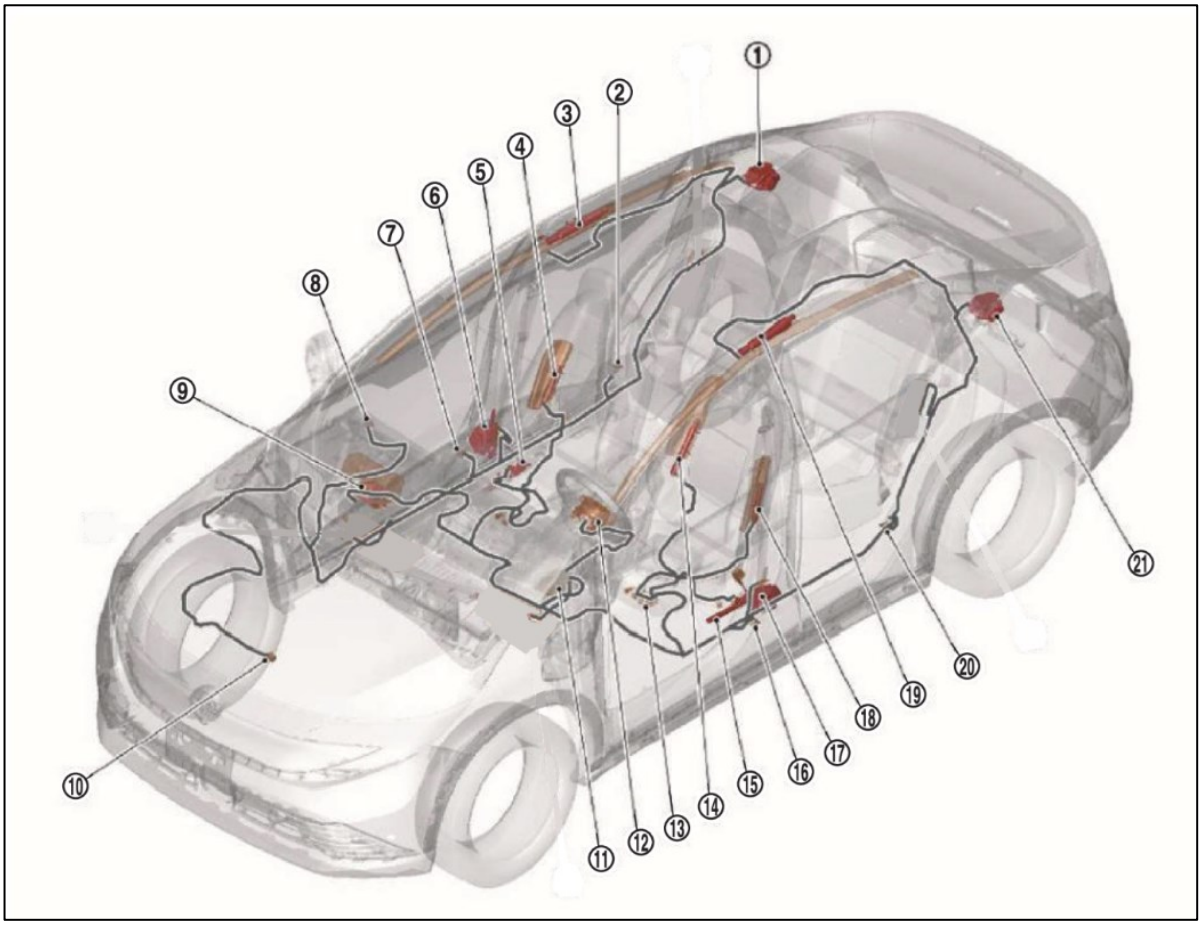
If at least **ten (10) minutes** have passed since the rescuer shut down the high-voltage system (refer to 3-2.3 Powering Down the High-voltage System (ERG–20)), then the rescuer can cut the vehicle except for the high-voltage battery.

If the rescuer cannot wait the full ten (10) minutes or shut down the high-voltage system, absolute care must be taken to avoid cutting HV parts and appropriate Personal Protective Equipment (PPE) must always be worn. DO NOT cut the high-voltage battery due to possible electrocution risk and electrolyte solution leakage.

4-2.1 SRS Air Bag System Components Location

Avoid cutting air bag system parts. However, the vehicle can be cut (except inflators) under the following conditions:

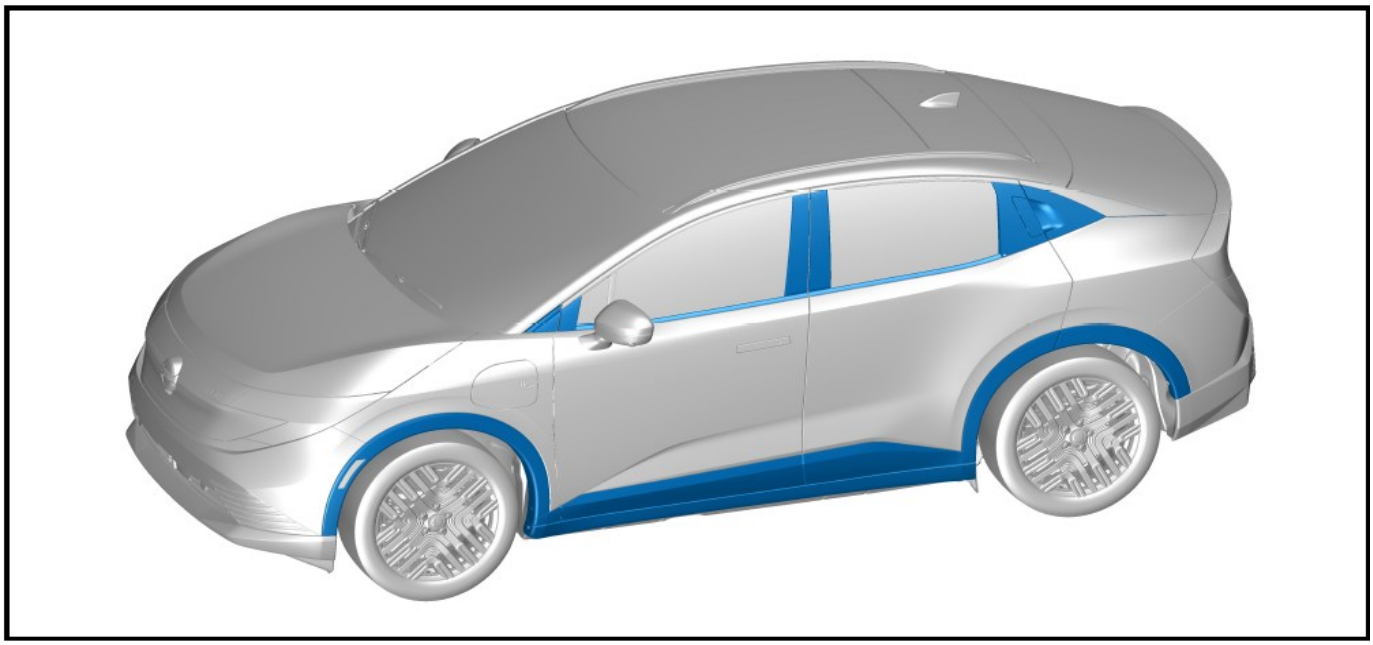
- The front, side and curtain air bags have deployed.
- At least three (3) minutes have passed after the 12-volt battery negative (-) cable has been disconnected and the high-voltage system has been shut down.



1. Rear seat belt pre-tensioner inflator
2. C-pillar satellite sensor
3. Curtain air bag module inflator
4. Front side air bag module inflator
5. Lap pre-tensioner inflator
6. Front seat belt pre-tensioner inflator
7. B-pillar satellite sensor
8. Front door satellite sensor
9. Passenger air bag module inflator
10. Crash zone sensor
11. Air bag diagnosis sensor unit
12. Driver air bag module inflator
13. Front door satellite sensor
14. Front center air bag module inflator
15. Lap pre-tensioner inflator
16. B-pillar satellite sensor
17. Front seat belt pre-tensioner inflator
18. Front side air bag module inflator
19. Curtain air bag module inflator
20. C-pillar satellite sensor
21. Rear seat belt pre-tensioner

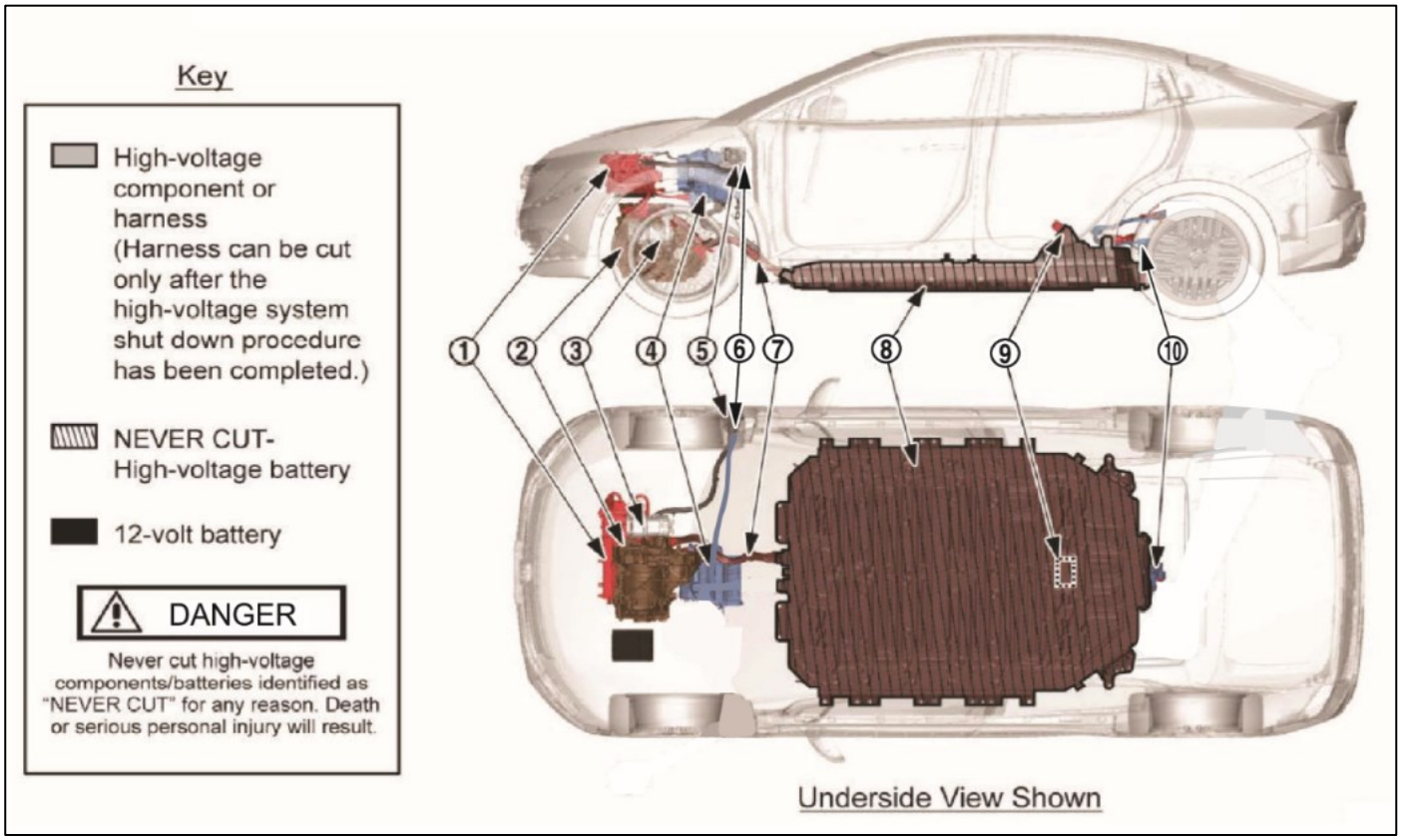
4-2.2 Plastic Parts Locations

The resin parts shown in blue below may not be able to be spread with a spreader.



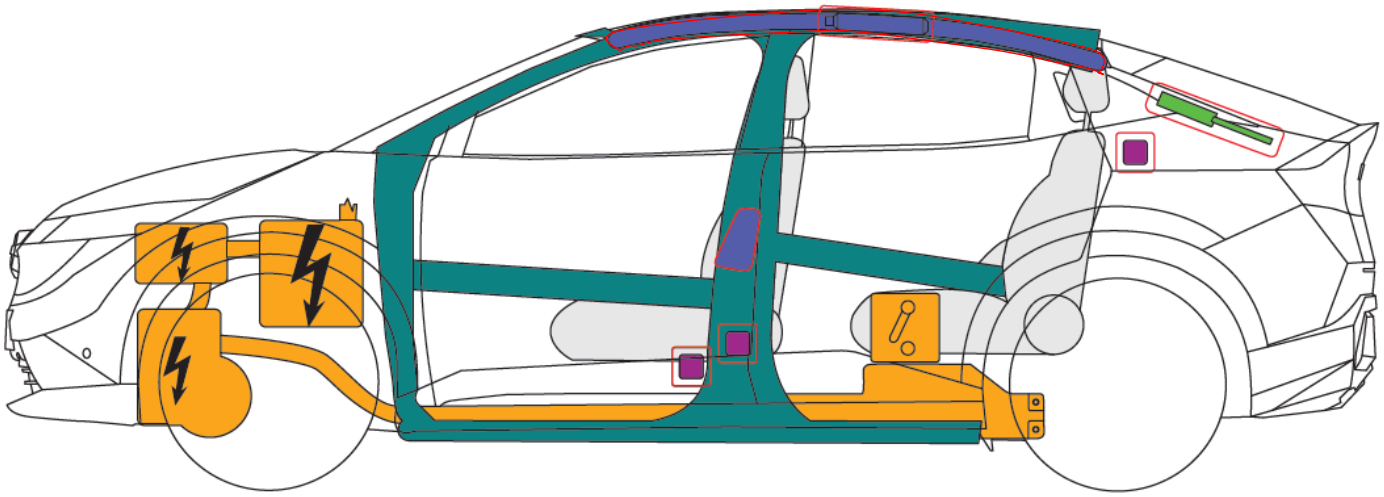
4-2.3 Vehicle Cut Sheet

The below diagram describes the layout of high voltage harness to identify to cut disable the high voltage system

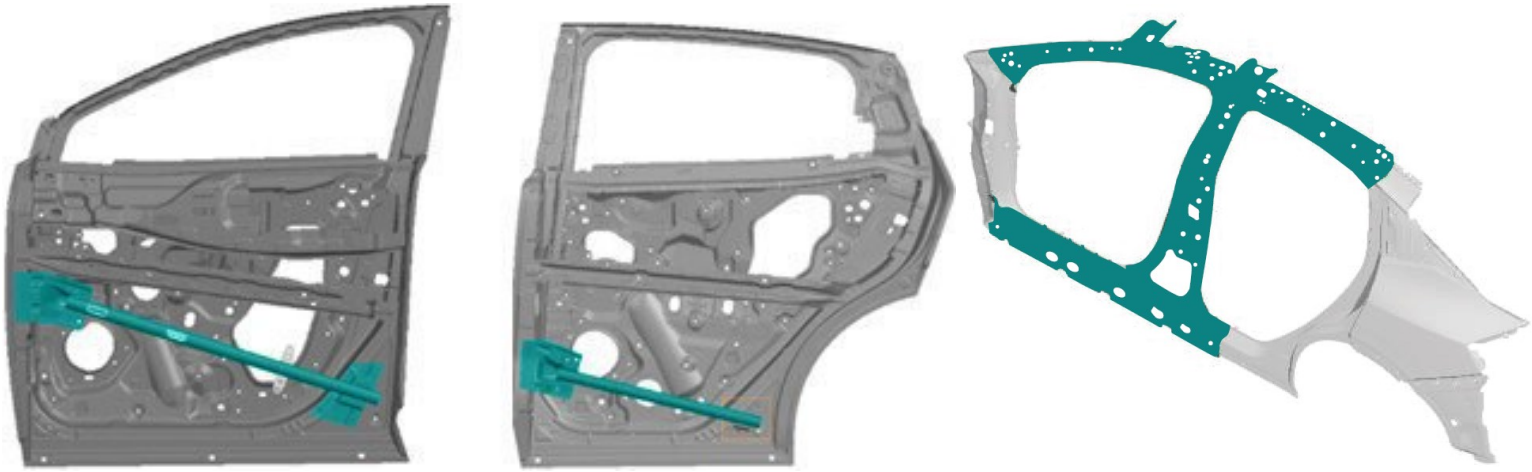


1. High voltage power delivery assembly
   - On-board charger
   - DC/DC converter
   - High voltage junction box
2. Electric powertrain assembly
   - Inverter
   - Traction motor
3. Electric air conditioner compressor
4. A/C unit (Built-in PTC cabin heater)
5. Normal charge port
6. Quick charge port
7. High-voltage cables
8. High-voltage (Li-ion) battery
9. Service plug
10. PTC battery heater (If so equipped)

4-2.4 High Strength Steel Locations Vehicle



High Strength Zone



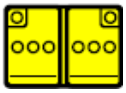
WARNING

Because the strength of side impact protection beams and ultra-high tensile strength sheet steel is higher than sheet steel and high tensile strength sheet steel, it is difficult to cut through side impact protection beam and ultra-high tensile strength sheet steel with conventional cutters. Avoid side impact protection beam and parts made from ultra-high tensile strength sheet steel when cutting a vehicle.

5. Stored Energy / Liquids / Gases / Solids

5-1 General Fluid Spills and Gas Leaks

5-1.1 Fluids and gases used in this vehicle

Type	Capacity	Dangers
	**Lithium-ion 350V**	
	**12V**	
	**R-1234yf 550 ± 25 g**	

5-1.2 Gas leaks

There are various types of gas used in vehicles. For example, there is nitrogen (N2) gas used in gas filled dampers and refrigerant gas for air conditioners

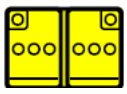
Refrigerant Gas

- The refrigerant gas used in air conditioner is R-1234yf.
- The gas is containing carbon and fluorine.
- The gas is colourless, odourless, and harmless.

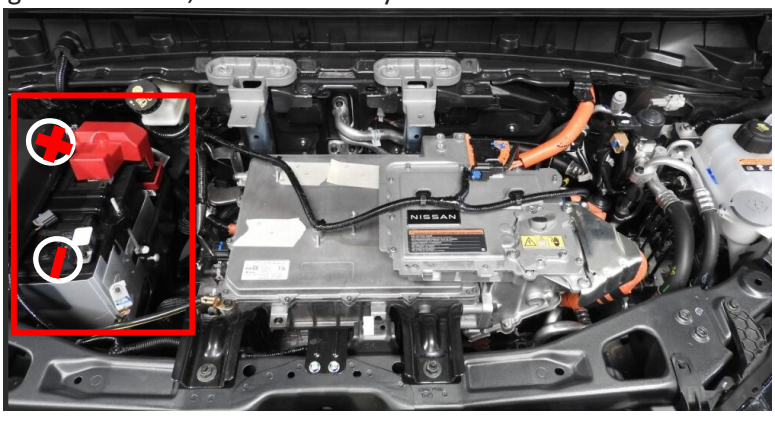
5-2 Components Requiring Special Attention

The construction and functions of components requiring special attention during emergency response are described in this section.

5-2.1 Low-voltage Battery



- The 12 V battery supplies power to the ECUs that control various systems and auxiliary components such as the power door lock, power window, power seat, etc.
- For the sake of ensuring safe emergency response operations, it is necessary to completely shut off the vehicle. Before performing any work, disconnect the negative battery terminal from the 12 V battery and remember to shut off the power to the electrical system. This will prevent electrical fires and keep the vehicle from starting.
- It is important to note that the 12 V battery electrolyte contains dilute sulfuric acid.
- Depending on the model, the 12 V battery can be found in various locations in the motor compartment.



5-2.2 High-voltage Battery

First Responders:

If electrolyte solution leakage, or damage such as any problem with the high-voltage battery casing are observed, first responders should attempt to neutralize the battery by applying a large volume of water to the battery pack while wearing appropriate Personal Protective Equipment (PPE). The neutralization process helps stabilize the thermal condition of the battery pack but does not discharge the battery.

Dismantlers/Roadside Assistance Workers:

In cases of battery case breach or electrolyte leakage, contact the fire department immediately. If you must walk away from the vehicle, notify an appropriate responder of the fact that the vehicle contains a high-voltage system and warn all others.

High-voltage Battery Electrolyte Solution Characteristics:

- Clear in color
- Sweet odor
- Similar viscosity to water
- Since the high-voltage battery is made up of many small, sealed battery modules, electrolyte solution leakage should be minimal.

Please refer to 1-1.5 High-Voltage-Related and 12-volt-Related Component Locations and Descriptions (ERG-06) for battery specifications.

⚠WARNING

When conventional coolant leaks (check reservoir) from the high voltage (HV) battery cooling system, HV-battery can become unstable with risk of thermal runaway. An increasing HV-battery temperature might be an indicator of thermal runaway.

⚠WARNING

The battery assembly cover should never be breached or removed under any circumstances, including fire. Doing so might result in severe electrical burns, shocks, or electrocution.

⚠WARNING

When dealing with wastewater from extinguishing lithium-ion battery fires, fire services must treat it as hazardous waste due to its potential chemical contamination.

⚠WARNING

The high-voltage battery contains electrolyte solution. To avoid exposure to electrolyte solution and serious personal injury, always wear appropriate solvent resistant Personal Protective Equipment (PPE) and read the following precautions:

- **Electrolyte solution is a skin and eye irritant – If contact with skin or eyes, rinse with plenty of water and see a doctor immediately.**
- **If electrolyte leak occurs, wear appropriate solvent resistant PPE. Absorb the electrolyte with a piece of dry cloth or equivalent absorbent material and keep it in an airtight container for proper disposal. Be sure to adequately ventilate the area.**
- **Electrolyte solution is highly flammable.**
- **Electrolyte liquid or fumes that have come into contact with water vapours in the air will create an oxidized substance. This substance may irritate skin and eyes. In these cases, rinse with plenty of water and see a doctor immediately.**
- **Electrolyte fumes (when inhaled) can cause respiratory irritation and acute intoxication. Move to fresh air and wash mouth with water. See a doctor immediately.**

6. In Case of Fire

6-1 Vehicle Fire

When dealing with Nissan vehicle fires in emergency situations, it's important to follow specific procedures and take note of crucial points. For information on the pictograms used, please refer to chapter 10. Explanation of Pictograms Used (ERG-79) for an explanation.

6-1.1 Fire Extinguishing

Water is a proven effective extinguishing agent. Additionally, it is essential to use a fire extinguisher suitable for flammable liquid fires (such as gasoline, grease, oil, etc.), electrical fires (involving electrical wiring, electric devices, etc.), and general fires (involving solid objects, etc.).

LARGE AMOUNTS OF PURE WATER

⚠ **• Always utilize full Personal Protective Equipment (PPE) and self-contained breathing apparatus during firefighting operations. Smoke from a Nissan vehicle fire is similar to smoke from a conventional vehicle fire**
• In the case of extinguishing a fire with water, large amounts of water from a fire hydrant (if possible) must be used. DO NOT extinguish fire with a small amount of water.

⚠ **• In the event of a small fire, a Type ABC fire extinguisher may be used for an electrical fire caused by wiring harnesses, electrical components, etc. or oil fire.**

Fire attack should follow standard firefighting practices.

If you must walk away from the vehicle, notify an appropriate responder or a rescue person of the fact that the vehicle is a hybrid car and contains a high-voltage system and warn all others.

During overhaul operations (late-stage fire suppression process to examine for remaining sources of heat), make sure the battery is fully cooled to avoid fire re-ignition. The battery could reignite if it is placed near fire. To avoid possible electrical shock and serious personal injury, do not breach the high-voltage battery case.

In a fire situation involving electrolyte burning, smoke from vehicles, or inhalation of toxic gases or vapours, there are several serious health and safety risks. Here's a breakdown of what to watch for and how to respond:

Electrolyte Burning (e.g., Lithium-ion Batteries):

Electrolyte materials, especially from lithium-ion batteries, can burn intensely and release toxic and corrosive vapours, including:

- **Hydrogen fluoride (HF)**
- **Phosphorus oxides**
- **Carbon monoxide and dioxide**
- **Volatile organic compounds (VOCs)**

Risks:

- **Severe eye, skin, and respiratory irritation or damage**
- **Risk of chemical burns and asphyxiation**

Advice

- **Avoid exposure; use self-contained breathing apparatus (SCBA) and chemical-resistant gear**

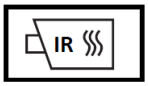
6-1.2 Use a thermal imaging camera

As a precaution, it is strongly recommended for first responders to utilize a thermal imaging camera to verify that there is no potential for thermal runaway and reignition.

Once the battery has been completely cooled down (which may require up to 24 hours), it should be continuously monitored for an additional hour to ensure that there is no reoccurrence of heat. Subsequently, the vehicle should be driven to an open and level area, and a 15-meter safety zone should be established to prevent individuals from approaching the vehicle.

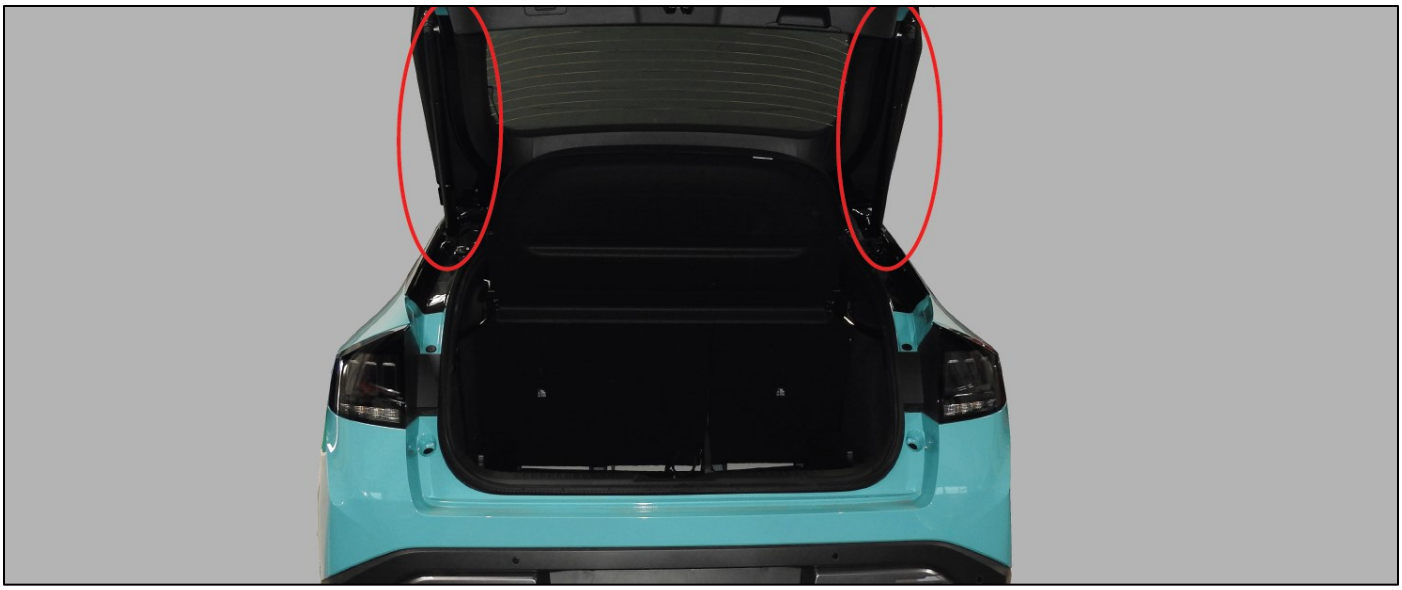
Responders should always protect themselves with Personal Protective Equipment (PPE), including a Self-Contained Breathing Apparatus (SCBA), and take appropriate measures to protect civilians downwind from the incident.

POTENTIAL RISK OF HV-BATTERY FIRE RE-IGNITION / DELAYED FIRE!



6-1.3 Gas strut - Risk of missile effect

Gas struts in the vehicle tailgate present a significant missile effect hazard during a vehicle fire. These struts are under high internal pressure from gas (typically nitrogen) and oil. In a fire, the intense heat can cause the gas to expand rapidly, leading to failure and propelling components at high speeds.



7. In Case of Submersion

7-1 Water Submersion

When pulling a vehicle out of water, it's important to first try to get it out as much as possible. Then, immobilize and disable the vehicle before beginning any operation.

For high voltage system disabling methods, Refer to chapter " 3.Disable_Direct_Hazards_/_Safety Regulation (ERG-15)"

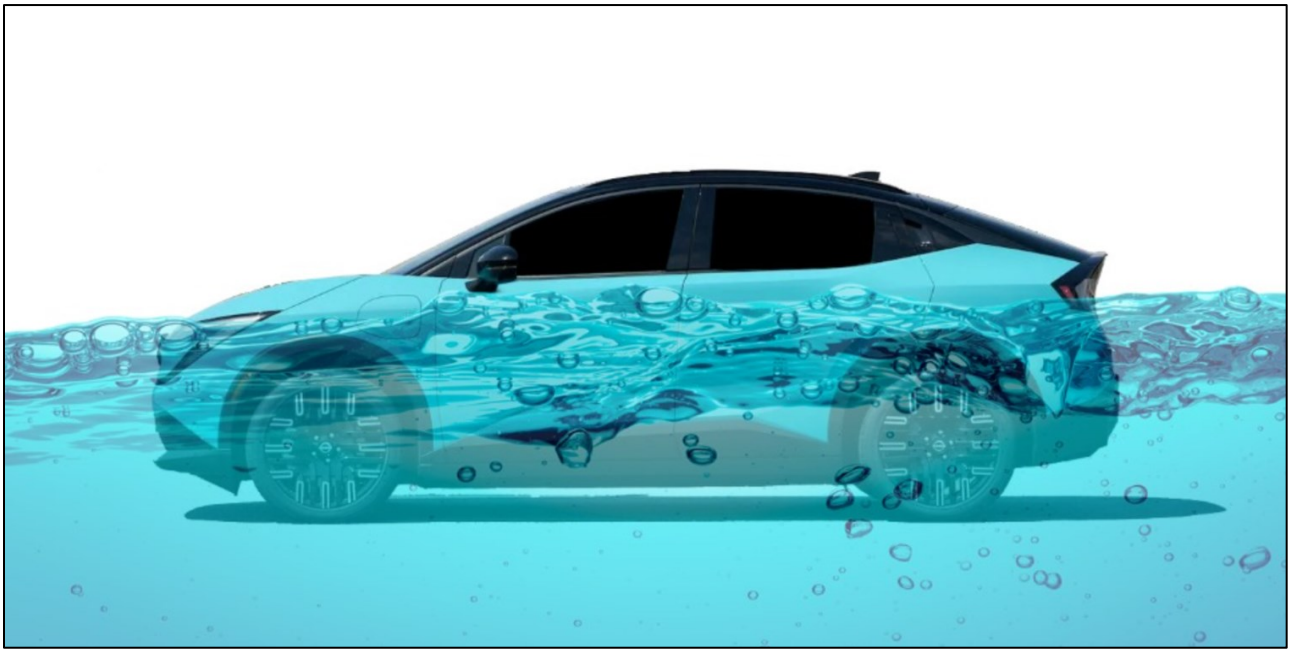
For rescue procedures, refer to chapter" 4.Access_to_the_Occupants (ERG-26)".

⚠ DANGER

⚠ Damage level of submerged vehicle may not be apparent. Handling a submerged vehicle without appropriate Personal Protective Equipment (PPE) will result in serious injury or death from electrical shock.

⚠WARNING

- **⚠ The power switch of the submerged vehicle must be turned OFF first, if possible. Then the vehicle must be completely out of the water and drained to avoid electrical shock.**
- **Always wear appropriate Personal Protective Equipment (PPE) and remove/ drain water before removing the service plug when working on a vehicle after a fire or submersion to avoid electrical shock.**
- **If the vehicle is in the water, to avoid electrical shock NEVER touch the high- voltage components, harnesses or service plug. PPE must always be worn when touching or working on high-voltage components.**



8. Towing / Transportation / Storage

8-1 Roadside Assistance

8-1.1 Jump Starting

To start the EV system with a booster battery, the instructions and precautions below must be followed.

⚠WARNING

If done incorrectly, jump starting can lead to a 12-volt battery explosion, resulting in severe personal injury or death. It could also damage your vehicle.

Discharged 12-volt battery may cause the following issues:

- The instrument cluster cannot be displayed while the power switch is turned ON. The start-up sound is not audible. (The electric car system cannot start.)
- The high-voltage battery cannot be charged.
- The vehicle cannot be shifted out of PARK normally.

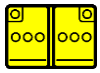
⚠WARNING

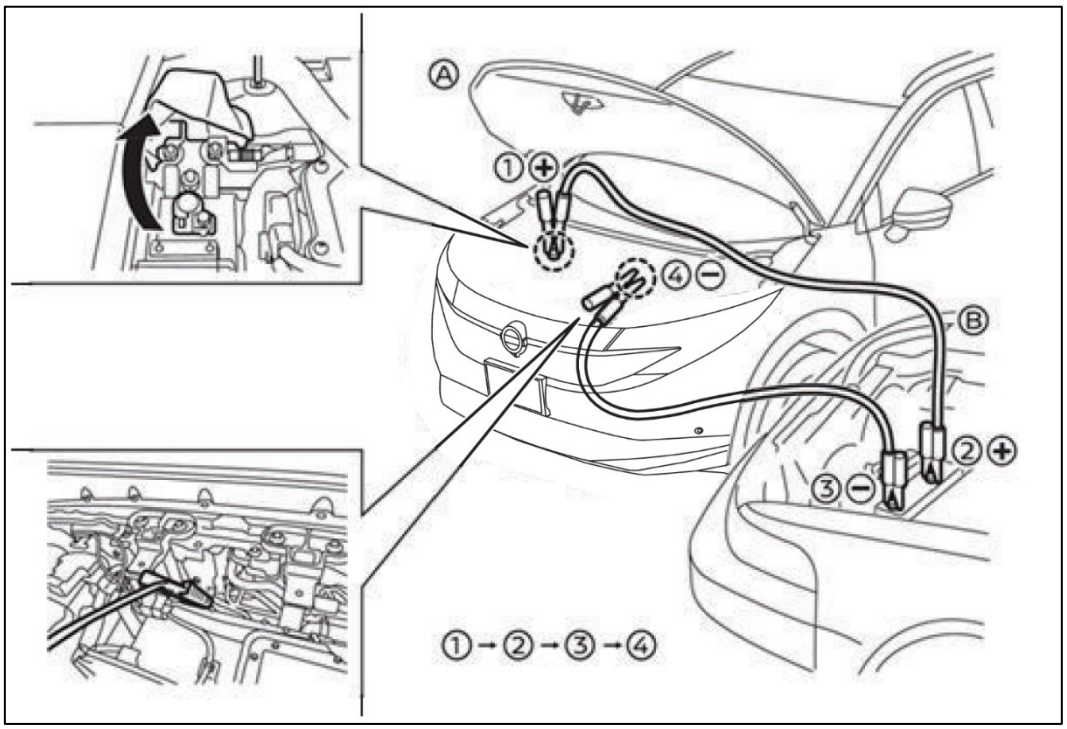
- **⚠ To avoid electrical shock, the high-voltage battery CANNOT be jump started.**
- **Explosive hydrogen gas is always present in the vicinity of the 12-volt battery. Keep all sparks and flames away from the 12-volt battery.**
- **Do not allow battery fluid to come into contact with eyes, skin, clothing or painted surfaces. Battery fluid is a corrosive sulfuric acid solution that can cause severe burns. If the fluid comes into contact with anything, immediately flush the contacted area with water.**
- **The booster battery must be rated at 12 volts. Use of an improperly rated battery can damage the vehicle.**
- **Whenever working on or near a 12-volt battery, always wear suitable eye protectors (for example, goggles or industrial safety spectacles) and remove rings, metal bands, or any other jewelry. Do not lean over the 12-volt battery when jump starting.**
- **Do not attempt to jump start a frozen battery. It could explode and cause serious injury.**
- **LEAF is equipped with an automatic cooling fan. It could come on at any time. Keep hands and other objects away from it.**
- **Always follow the jump starting instructions below. Failure to do so could result in damage to the charging system and cause personal injury.**

⚠CAUTION

- **Do not use LEAF to jump start another vehicle.**
- **Do not attempt to perform a jump start on the 12-volt battery while the high-voltage battery is being charged. Doing so may damage the vehicle or charging equipment and could cause an injury.**

Jump Starting Procedures





1. If the booster battery is in another vehicle (**B**), position the two vehicles (**A** and **B**) to bring their 12-volt batteries into close proximity to each other.

   DO NOT allow the two vehicles to touch.
2. Apply the parking brake.

   If the 12-volt battery is discharged, the power switch cannot be moved from the OFF position. Connect the jumper cables to the booster vehicle (B) before pushing the power switch.
3. Push the P (Park) position switch to place the vehicle in the P (Park) position.
4. Switch off all unnecessary electrical systems (headlights, heater, air conditioner, etc.).
5. Place the power switch in the OFF position.
6. Remove the vent caps (if so equipped) on the 12-volt battery.
7. Connect jumper cables in the sequence as illustrated **(** ①→ ②→③→④**)**.

⚠CAUTION

- **If the 12-volt battery is discharged, the power switch cannot be moved from the OFF position. Connect the jumper cables to the booster vehicle (B) before pushing the power switch.**
- **Always connect positive (+) to positive (+) and negative (-) to body ground (for example, as illustrated), not to the 12-volt battery.**
- **Make sure the jumper cables do not touch moving parts in the motor compartment and that the cable clamps do not contact any other metal.**

8. Start the engine of the booster vehicle (**B**).
9. While the booster vehicle (**B**) engine is running, turn the power switch ON while pressing the brake pedal in order to place the LEAF in READY mode.

⚠CAUTION

If the system does not start right away, push the power switch to the OFF position and wait at least 10 seconds before trying again.

10. After starting the EV system, carefully disconnect the negative cable and then the positive cable (④→③→②→①). Keep the EV system on for over twenty (20) minutes to charge the 12-volt battery.
11. Replace the vent caps (if so equipped).
12. If necessary, connect the vehicle to a charging station or EVSE (Electric Vehicle Supply Equipment) to charge the high-voltage battery. The vehicle cannot be driven unless the high-voltage battery is charged.

    NOTE:

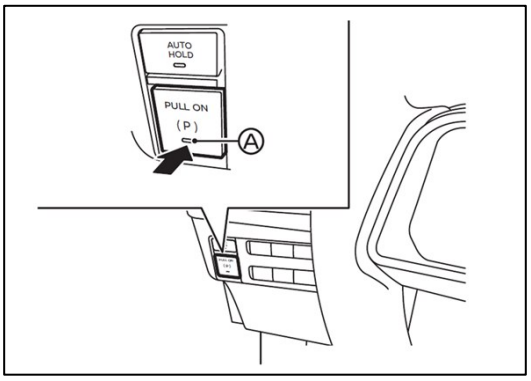
    If it is not possible to turn the LEAF system ON by following this procedure, it is recommended you contact a NISSAN certified LEAF dealer immediately.

8-1.2 Electric Parking Brake Release Procedures

Releasing Electric Parking Brake Using Parking Brake Switch

If so equipped, the electric parking brake can be released by operating the parking brake switch shown below.

1. With the power switch in the ON position, depress the brake pedal and push the switch down.
   The indicator light (**A**) will turn off.



2. Check that the electric parking brake indicator light (Ⓟ or PARK) goes out.
3. If the electric parking brake indicator light remains illuminated or parking brake cannot be released, refer to Releasing Electric Parking Brake Where Parking Brake Switch Cannot Be Used (ERG–42),in this section.

Releasing Electric Parking Brake Where Parking Brake Switch Cannot Be Used

If the vehicle is equipped with electric parking brake and cannot be released using the parking brake switch, the following steps can be used to mechanically release the electric parking brake on each rear brake caliper assembly.

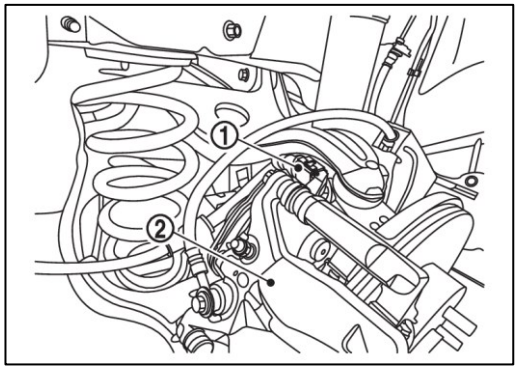
⚠WARNING

To avoid possible personal injury or vehicle damage, use wheel chocks or take appropriate steps to prevent the vehicle from rolling freely.

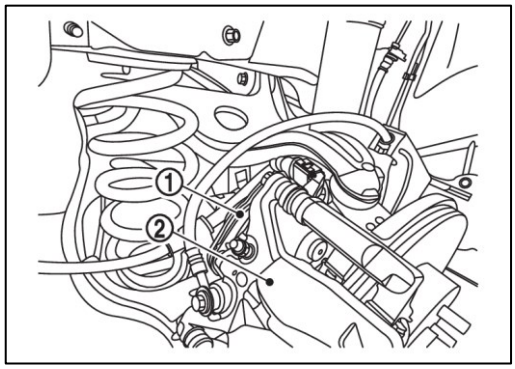
⚠WARNING

Never reuse the parking brake actuator. Doing so may cause brake system failure and possibly result in serious personal injury.

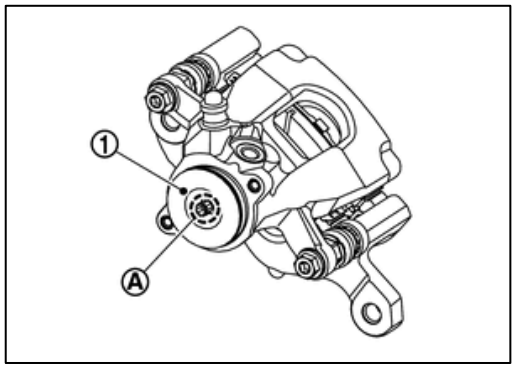
1. Disconnect the parking brake actuator harness connector (**1**) from the rear caliper assembly (**2**).



2. Remove the parking brake actuator (**1**) from the rear brake caliper assembly (**2**).



3. Rotate the rear brake caliper assembly (**1**) spindle part (**A**) clockwise to release the parking brake.



8-1.3 P (Park) Position Release Procedure

If you need to release the vehicle from the P (Park) position, proceed as follows. When power switch is turned OFF, LEAF automatically shifts to P position.

⚠WARNING

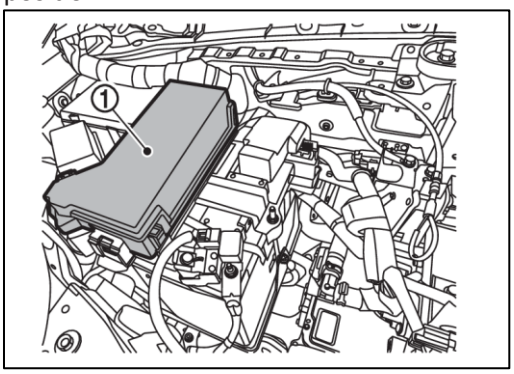
To avoid possible personal injury or vehicle damage, use wheel chocks or take appropriate steps to prevent the vehicle from rolling freely.

Never set the vehicle in READY state

Be sure to firmly position wheel chocks before P (Park) position is released.

1. 12V electric power is supplied with booster cable to the 12V battery.

2. Set the power switch to ON without depressing brake pedal.
3. Check that parking brake is activated. (Check that indicator lamp for parking brake is ON.)
4. Press the N button on the shift buttons.
   a. Depress brake pedal and shift to “N” position. After maintaining this status sometime, check that shift position indicator is indicated to “N” position.
5. Open hood and remove fuse and fusible link block cover (**1**).

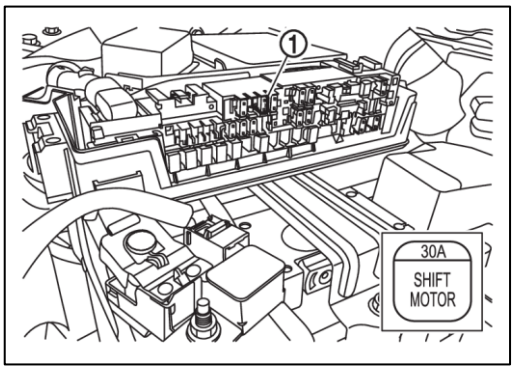


NOTE:

When the shift position is in N and the driver side door is opened, the shift position will automatically change to P.

If the passenger side door is opened, the shift position will remain in N. Therefore, when working alone, exit the vehicle from the passenger side door.

6. Remove 30A fuse (shown as SHIFT MOTOR) (**1**).



7. Release parking brake.

⚠WARNING

To avoid possible personal injury or vehicle damage, use wheel chocks or take appropriate steps to prevent the vehicle from rolling freely.

8. Set the power switch to OFF.
9. Remove booster cable from 12V battery.
10. Move the vehicle while power switch is OFF.

⚠WARNING

To avoid possible personal injury or vehicle damage, use wheel chocks or take appropriate steps to prevent the vehicle from rolling freely.

Be sure to firmly position wheel chocks when P (Park) position is manually released.

Reset Procedure

1. Disconnect the 12V battery cable from the negative terminal.
2. Install 30A fuse (shown as SHIFT MOTOR).
3. Install fuse and fusible link block cover.
4. Connect the 12V battery cable to the negative terminal.
5. Wait for 5 seconds after set the power switch to ON and then push P position switch.
6. Set the power switch to OFF and wait for 5 seconds.

8-1.4 Towing

Vehicle Specifications

Length	4,350 mm (171.26 in).
Width (with outside mirrors)	2,098 mm (82.6 in).
Overall Height (with antenna)	1,548 mm (60.9 in).
Wheelbase	2,690 mm (105.9 in).
Minimum Ground Clearance	135 mm (5.4 in).
Overall Vehicle Weight	1,890-1,987 kg (4167.5-4381.4 lbs.) (Weight varies by equipment and trim level.)
Front Approach Angle	18.0°
Rear Departure Angle	23.7°

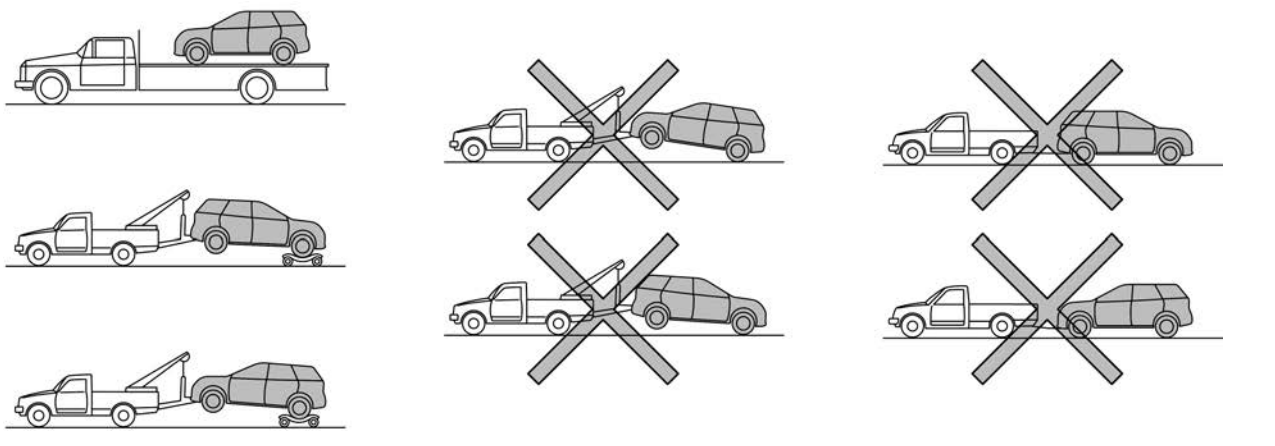
Towing Guidelines

Nissan strongly recommends that LEAF be towed with the vehicle be placed on a flatbed truck.

⚠CAUTION

- **Never tow with the four (4) wheels on the ground.**
- **Transport the vehicle only after turning the power switch OFF.**
- **Safety chains or cables must be attached only to the main structural members of the vehicle. Otherwise, the vehicle body will be damaged.**
- **Do not use the vehicle tie down hook to free a vehicle stuck in sand, snow, mud, etc.**
- **Never tow a vehicle using the vehicle tie down hook.**
- **Pulling devices should be routed so they do not touch any part of the suspension, steering, brake, high-voltage or cooling systems.**
- **Pulling devices such as ropes or canvas straps are not recommended for use in vehicle towing or recovery.**
- **All applicable state, local, and regional laws concerning towing operations must be complied with.**

NISSAN recommends that the vehicle be placed on a flatbed truck as illustrated:



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NOTE:

It is also permissible to transport the LEAF facing rearward on a flatbed.

NOTE:
If the vehicle cannot be placed in Neutral, a P (Park) release procedure may be required. Refer to 8-1.3 P (Park) Position Release Procedure (ERG–43).

Use of Vehicle Equipped Hooks for Recovery Operations

If the vehicle is stuck in sand, snow, mud, etc., use a tow strap or other device designed specifically for vehicle recovery. Always follow the manufacturer's instructions for the recovery device.

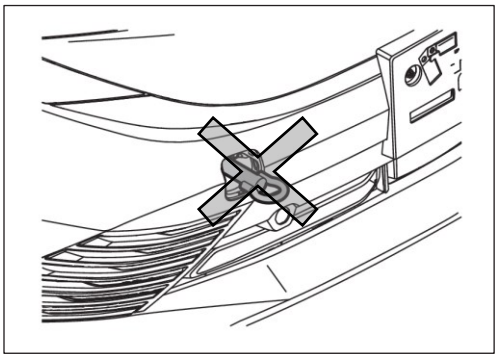
⚠WARNING

To avoid vehicle damage, serious personal injury or death when recovering a stuck vehicle:

- **Tow chains or cables must be attached only to main structural members of the vehicle.**
- **Do not use the vehicle tie-downs to tow or free a stuck vehicle.**
- **Only use devices specifically designed for vehicle recovery and follow the manufacturer's instructions.**
- **Always pull the recovery device straight out from the front of the vehicle. Never pull at an angle.**
- **Route recovery devices so they do not touch any part of the vehicle except the attachment point.**

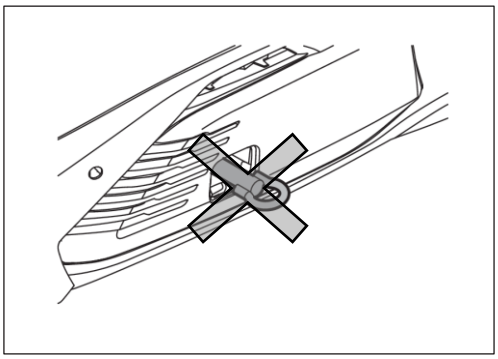
Front Tie Down Hook:

- Do not use the front tie down hook for towing or vehicle recovery.



Rear Tie Down Hook:

- Do not use the rear tie down hook for towing or vehicle recovery.

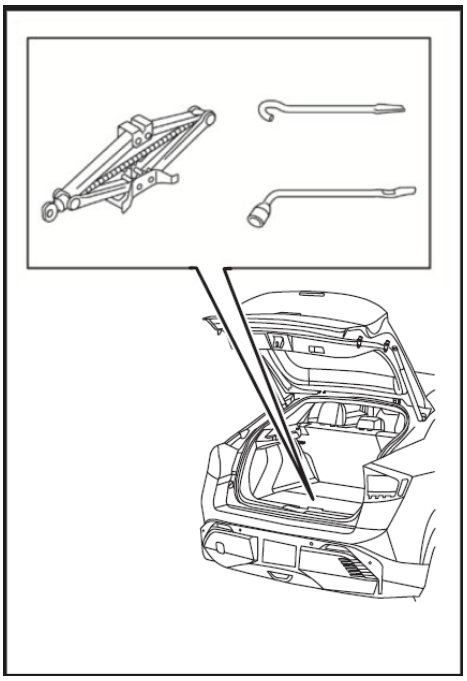


8-1.5 Storing the Vehicle

If LEAF needs to be stored or left unattended, the high-voltage system must be shut down and a sign put on the vehicle indicating it is an electric vehicle with high-voltage dangers.
Refer to 8-2 Storing the Vehicle (ERG–53).

8-1.6 Tools Installed In The Vehicle

The tools are located inside the cargo area. The jack, jack rod, and wheel nut wrench are dealer options for this vehicle and may not be equipped.

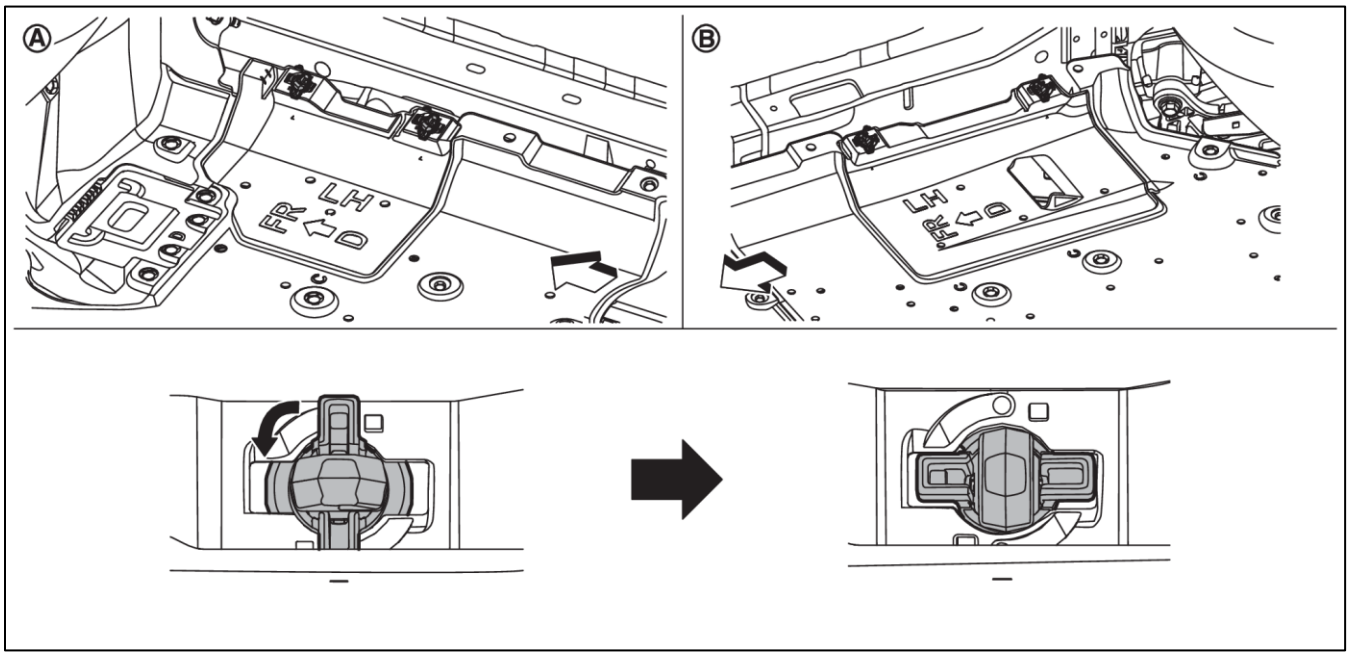


8-1.7 Jacking Up the Vehicle and Changing a Tire

LEAF is not equipped with a jack or spare tire as standard equipment. However, the following jacking instructions apply when using the optional Nissan jack.

1. Remove floor under cover lid fixing floor under cover clips toward arrows as shown in figure.

(**A**) : Front side

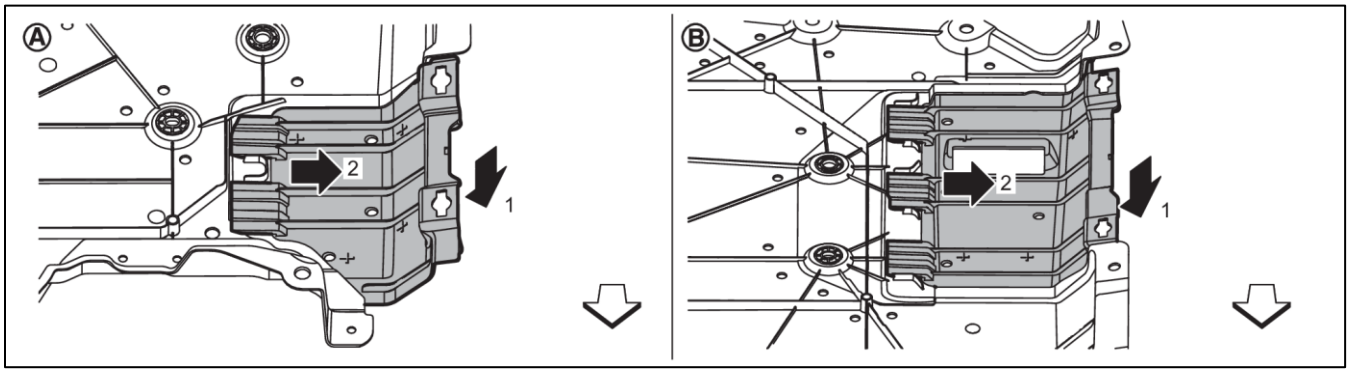


(**B**) : Rear side

⇦ : Vehicle front

2. Remove floor under cover lid according to numerical order 1→2 indicated arrows as shown in figure

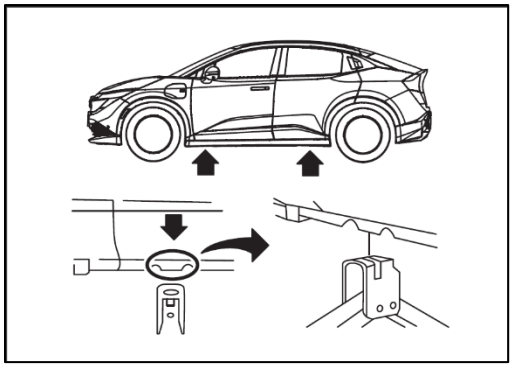
(**A**) : Front side



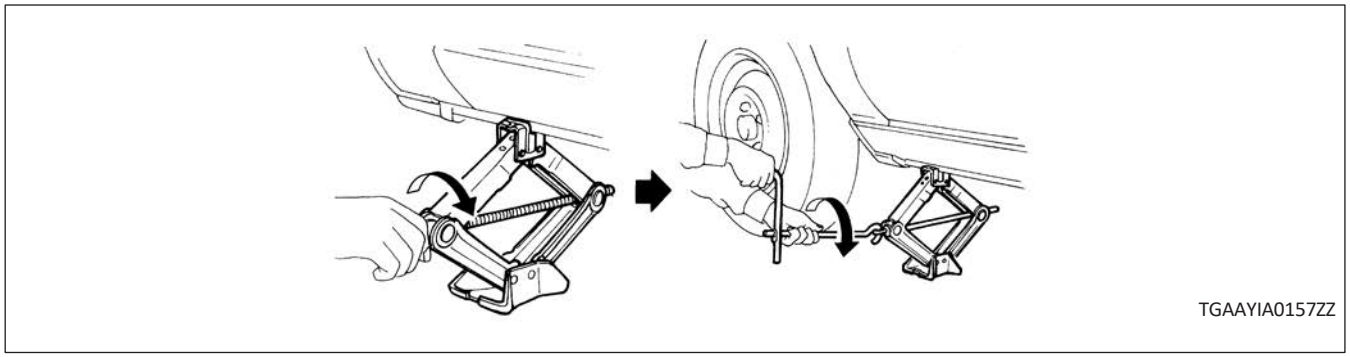
(**B**) : Rear side

⇦ : Vehicle front

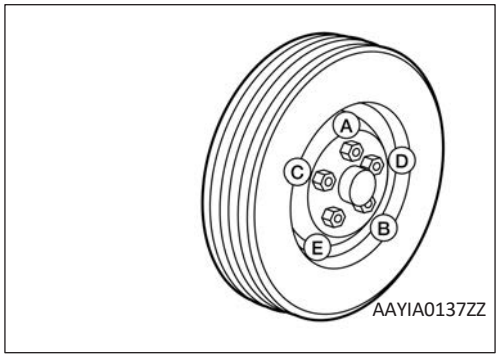
3. Place the jack directly under the jack-up point as illustrated so the top of the jack contacts the vehicle at the jack-up point. Align the jack head between the two notches in the front or the rear as shown. Also fit the groove of the jack head between the notches as shown. The jack should be used on level firm ground.



4. If so equipped, to remove the wheel cover.
5. Loosen each wheel nut one or two turns by turning it counterclockwise with the wheel nut wrench. Do not remove the wheel nuts until the tire is off the ground.
6. To lift the vehicle, securely hold the jack lever and rod with both hands as shown. Carefully raise the vehicle until the tire clears the ground. Remove the wheel nuts and then remove the tire.



7. Install new or repaired tire and hand-tighten the wheel nuts with the wheel nut wrench in an alternating pattern.



8. Securely torque the wheel nuts in an alternating pattern to 80 ft-lbs. (108 Nm).

8-1.8 Repairing a Flat Tire with Nissan Emergency Tire Puncture Repair Kit

LEAF is equipped with a tire repair kit as standard equipment. It is intended to be used to temporarily repair minor tire punctures.

⚠WARNING

- **After using the Emergency Tire Sealant to repair a minor tire puncture, do not drive the vehicle at speeds faster than 50 MPH (80 km/h).**
- **Immediately after using the Emergency Tire Sealant to repair a minor tire puncture, it is recommended you visit a NISSAN certified LEAF dealer to inspect, and repair or replace the tire. The Emergency Tire Sealant cannot permanently seal a punctured tire. Continuing operation of the vehicle without a permanent tire repair can lead to a crash.**
- **If you used the Emergency Tire Sealant to repair a minor tire puncture, it is recommended you visit a NISSAN certified LEAF dealer to replace the TPMS sensor in addition to repairing or replacing the tire.**
- **Nissan recommends using only NISSAN Genuine Emergency Tire Sealant provided with the vehicle. Other tire sealants may damage the valve stem seal which can cause the tire to lose air pressure.**
- **Make sure the parking brake is applied.**
- **Turn the power switch OFF while using the Emergency Tire Sealant to repair a flat tire.**
- **Have all passengers get out of the vehicle and stand in a safe place away from traffic and clear of the vehicle.**
- **Make sure the vehicle is located safely away from oncoming traffic and other hazards.**
- **Observe the following precautions when using the tire repair compound:**
  - **Swallowing the compound is dangerous. Immediately drink as much water as possible and seek prompt medical assistance.**
  - **Rinse well with lots of water if the compound comes into contact with skin or eyes. If irritation persists, seek prompt medical attention.**
  - **Keep the repair compound out of the reach of children.**
- **The emergency repair compound may cause a malfunction of the tire pressure sensors and cause the low tire pressure warning light to illuminate. Have the tire pressure sensor replaced as soon as possible**

⚠CAUTION

- **To avoid the Emergency Tire Puncture Repair Kit from being damaged during storage or use:**
  - **Only use the Emergency Tire Puncture Repair Kit on the LEAF vehicle. Do not use it on other vehicles.**
  - **Only use the kit to inflate the tires of the LEAF and to check the vehicle's tire pressure.**
  - **Only plug the compressor into a 12V DC car power point.**
  - **Keep the kit free of dirt and water.**
  - **Do not disassemble or modify the kit.**
  - **Do not drop the kit or allow hard impacts to the kit.**
- **Do not use the Emergency Tire Puncture Repair Kit under the following conditions. It is recommended you contact a NISSAN certified LEAF dealer or professional road assistance:**
  - **when the sealant has passed its expiration date (shown on the label attached to the bottle).**
  - **when the cut or the puncture in the tire is approximately 0.20 in (5 mm) or longer.**
  - **when the tire sidewall is damaged.**
  - **when the vehicle has been driven with extremely low tire pressure.**
  - **when the tire has come off the inside or the outside of the wheel.**
  - **when the wheel is damaged.**
  - **when two (2) or more tires are flat.**

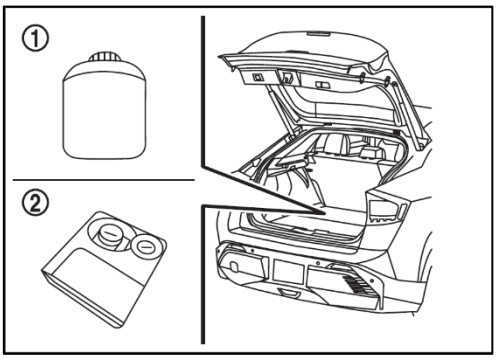
–possible.

Take out the emergency tire puncture repair kit from the storage area under the luggage floor board. The repair kit consists of the following items:

(1). NISSAN Genuine Emergency Tire Sealant bottle

(2). Air compressor*

*: The compressor shape may differ depending on the models.



Before Using Emergency Tire Puncture Repair Kit

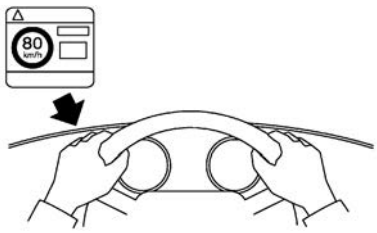
- If any foreign object (for example, a screw or nail) is embedded in the tire, do not remove it.
- Check the expiration date of the sealant (shown on the label attached to the bottle). Never use a sealant if the expiration date has passed.

Repairing the Tire

1. Take out the speed restriction sticker from the air compressor, then put it in a location where the driver can see it while driving.

⚠CAUTION

Do not obstruct the view of gauges or warning lights with the sticker. Do not put the sticker on the steering wheel pad.



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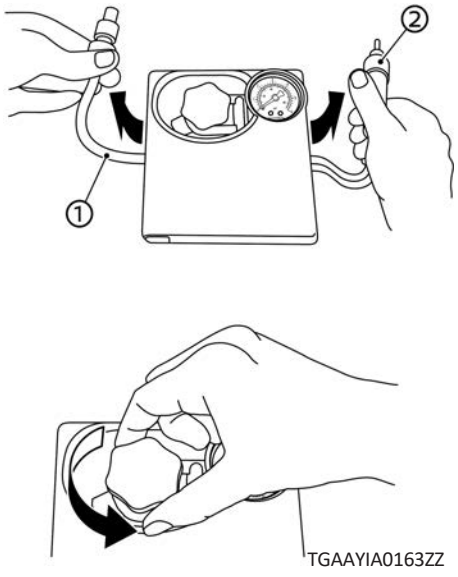
2. Take the hose (**1**) and power plug (**2**) out of the air compressor. Remove the cap of the bottle holder from the air compressor.



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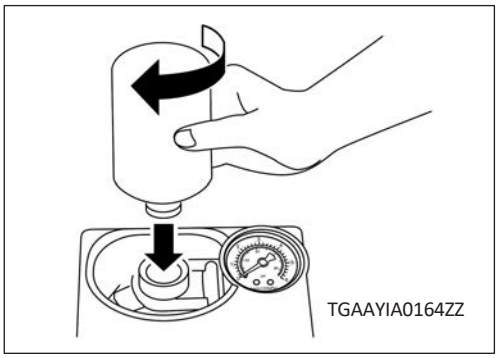
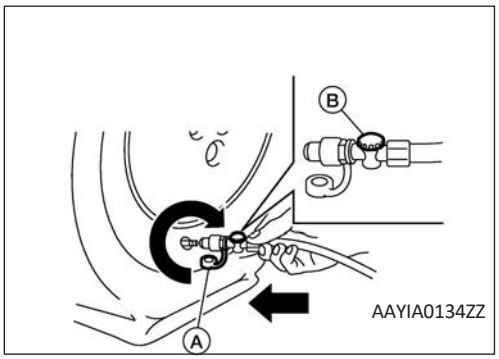
3. Remove the cap from the tire sealant bottle and screw the bottle clockwise onto the bottle holder. Leave the bottle seal intact. Screwing the bottle onto the bottle holder will pierce the seal of the bottle.

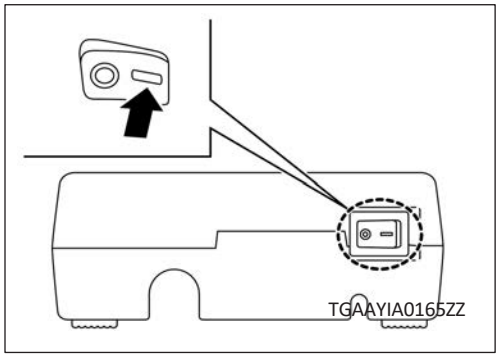


4. Remove the cap from the tire valve on the flat tire.

5. Remove the protective cap (**A**) of the hose and screw the hose securely onto the tire valve. Make sure that the pressure release valve (**B**) is securely tightened. Make sure that the air compressor switch is in the OFF (O) position and then insert the power plug into the power outlet in the vehicle.



6. Place the power switch in the “ON” position.
7. Turn the air compressor switch to the ON (-) position and inflate the tire up to the pressure that is specified on the tire and loading information label affixed to the driver’s side center pillar if possible or to the minimum of 26 psi (180 kPa). Turn the air compressor off briefly in order to check the tire pressure with the pressure gauge.
   If the tire is inflated to higher than the specified pressure, lower the tire pressure by releasing air with the pressure release valve.



NOTE:

- **There is a possibility that the pressure reaches 87 psi (600 kPa) while the tire is being inflated, but it is normal condition. Usually the pressure will drop in about 30 seconds.**
- **Do not operate the compressor for more than 10 minutes.**

⚠WARNING

- **To avoid serious personal injury while using the emergency tire puncture repair kit:**
  - **Securely tighten the compressor hose to the tire valve. Failure to do so can cause the sealant to spray into the air and get into your eyes or on your skin.**
  - **Do not stand directly beside the damaged tire while it is being inflated because of the risk of rupture. If there are any cracks or bumps in the tire, turn the compressor OFF immediately.**

If the tire pressure does not increase to 26 psi (180 kPa) **within ten (10) minutes**, the tire may be seriously damaged, and **the tire cannot be repaired with this tire repair kit**.

It is recommended you contact a NISSAN certified LEAF dealer.

8. When the tire pressure is at the specified amount, turn the air compressor OFF. If the tire cannot be inflated to the specified amount, the air compressor can be turned OFF at the minimum of 26 psi (180 kPa). Remove the power plug from the power outlet and quickly remove the hose from the tire valve. Attach the protective cap and the valve cap.

⚠WARNING

To avoid serious personal injury when stowing the emergency tire puncture repair kit keep the sealant bottle screwed into the compressor. Failure to do so can cause the sealant to spray into the air and get into your eyes or on your skin.

9. Immediately drive the vehicle for ten (10) minutes or 2 miles (3 km) at a speed below 50 MPH (80 km/h).
10. After driving, make sure the air compressor switch is in the OFF position. Then screw the hose securely onto the tire valve. Check the tire pressure with the pressure gauge. Temporary repair is completed if the tire pressure does not drop. Make sure the pressure is adjusted to the pressure specified on the tire and loading information label before driving.
11. If the tire pressure drops, repeat the steps from 5 to 10. If the pressure drops again or under 19 psi (130 kPa), **the tire cannot be repaired with this tire repair kit**. It is recommended you contact a NISSAN certified LEAF dealer. The sealant bottle and hose cannot be reused to repair another punctured tire. It is recommended you contact a NISSAN certified LEAF dealer to purchase replacements.

After Repairing the Tire

It is recommended you visit a NISSAN certified LEAF dealer for tire repair/replacement as soon as possible.

⚠WARNING

- **After using Emergency Tire Sealant to repair a minor puncture, do not drive the vehicle at speeds faster than 50 MPH (80 km/h).**
- **Immediately after using Emergency Tire Sealant to repair a minor tire puncture, it is recommended you take the vehicle to a NISSAN certified LEAF dealer to inspect and repair or replace the tire. The Emergency Tire Sealant cannot permanently seal a punctured tire. Continuing operation of the vehicle without a permanent tire repair can lead to a crash.**
- **Do not inject any tire liquid or aerosol tire sealant into the tires as this may cause a malfunction of the tire pressure sensors.**
- **If you used the Emergency Tire Sealant to repair a minor tire puncture, it is recommended you visit a NISSAN certified LEAF dealer to replace the TPMS sensor in addition to repairing or replacing the tire.**
- **Nissan recommends using only NISSAN Genuine Emergency Tire Sealant provided with the vehicle. Other tire sealants may damage the valve stem seal which can cause the tire to lose air pressure.**

8-2 Storing the Vehicle

⚠WARNING

- **The service plug must be removed to shut down the high-voltage system for storage.**
- **Do not store a vehicle inside a structure. Keep the vehicle away from any structures or other vehicles if the high-voltage battery is severely damaged. There is possibility of delayed fire from a severely damaged high-voltage battery.**

⚠WARNING

How to handle a vehicle post fire:

- Just like conventional vehicles, for fire safety reasons electric/hybrid vehicles that have been involved in accidents should be parked in a restricted-access section of an open-air parking area a sufficient distance away from other vehicles, buildings, flammable objects and flammable surfaces.
- It is never recommended to park an electric/hybrid vehicle with a damaged high-voltage system in an enclosed hall.
- Alternatively, electric/hybrid vehicles involved in accidents may be parked in dedicated fire protection systems.
- Parked electric/hybrid vehicles involved in accidents, which have high-voltage components directly exposed to the weather, should be covered with a weatherproof tarpaulin.
- The vehicle should be marked accordingly, especially if it is to be delivered outside business hours.

⚠WARNING

- **A vehicle that has been submerged in water poses a threat of vehicle fire after some time for possible short circuits due to electrical corrosion (wiring and circuit boards to corrode in an electrochemical reaction with water). To store a vehicle that has been submerged in water, choose a well-ventilated place at least 15 meters (49.2 feet) away from other objects.**
- **To prevent a vehicle fire, avoid turning the ignition switch or power switch of a submerged vehicle to ACC or ON.**

8-2.1 ⚠DANGER Sign Example

If LEAF needs to be stored or left unattended, the high-voltage system must be shut down by removing the service plug (refer to 8-2.3 Removing the Service Plug (ERG–56)), and a sign put on the vehicle indicating it is an electric vehicle with high-voltage dangers. For example:

Person in charge:_____

DANGER:
HIGH VOLTAGE REPAIR
IN PROGRESS.
DO NOT TOUCH!

DANGER

DANGER

DANGER:
HIGH VOLTAGE REPAIR
IN PROGRESS.
DO NOT TOUCH!

Person in charge:_____

Copy this page and put it after folding on the roof of the vehicle in service.

AAYIA0020GB

8-2.2 Preparation Items

Preparation Items	Specification	Purpose
Personal Protective Equipment (PPE): Insulated gloves 	Up to 1,000V	For protection from high-voltage electrical shock
Insulated shoes 	–	
Safety shield 	–	
Leather gloves 	Must be able to fasten tight around the wrist (worn over insulated gloves).	To protect insulated gloves
Wrenches 	Size: varied	To remove battery and associated parts
Solvent resistant protection gloves	–	To utilize in the event of a high-voltage battery electrolytic solution leak.
Solvent resistant protection shoes	–	
Absorbent pad	The same pad used for internal combustion engine fluids can be used.	To absorb any high-voltage battery electrolytic solution leakage.
Standard fire fighting equipment	Standard fire fighting equipment Depending on type of fire (vehicle or battery) use standard fire fighting equipment (water or extinguisher).	To extinguish a fire.
Insulated tape	Insulating	To cover any damaged harnesses to protect from and prevent electrical shock. Tape should cover all bare or damaged wire.

Personal Protective Equipment (PPE) Protective Wear Control

Perform an inspection of the Personal Protective Equipment (PPE) items before beginning work. Do not use any damaged PPE items.

Daily Inspection

This inspection is performed before and after use. The responder who will be using the items should perform the inspection and check for deterioration and damage.

- Insulated rubber gloves should be inspected for scratches, holes and tears. (Visual check and air leakage test)
- Insulated safety boots should be inspected for holes, damage, nails, metal pieces, wear or other problems on the soles. (Visual check)
- Insulated rubber sheet should be inspected for tears. (Visual check)

Insulated Tools

When performing work at locations where high-voltage is applied (such as terminals), use insulated tools meeting 1,000V/300A specifications.

8-2.3 Removing the Service Plug

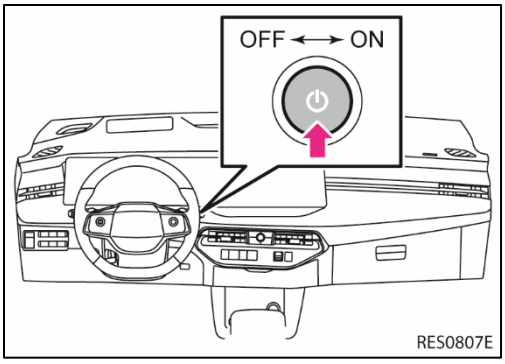
⚠ DANGER

- **⚠ Do not remove the service plug without always wearing appropriate Personal Protective Equipment (PPE) to help protect the responder from serious injury or death by electrical shock.**
- **⚠ Immediately cover the service plug socket with insulated tape. The high- voltage battery retains high-voltage power even when the service plug is removed. To avoid electric shock, NEVER touch the terminals inside the socket.**

⚠WARNING

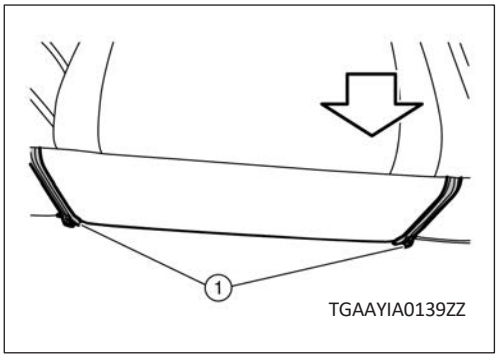
To avoid unintended reinstallation and risk of electrical shock and severe personal injury or death, the service plug should be securely stored away from the vehicle while the vehicle is in storage.

1. Check the READY indicator status. If it is ON, the high-voltage system is active.
2. Place the selector lever in the Park (P) position.
3. Press the power switch once to turn OFF the high-voltage system. Then verify whether the READY indicator is OFF.



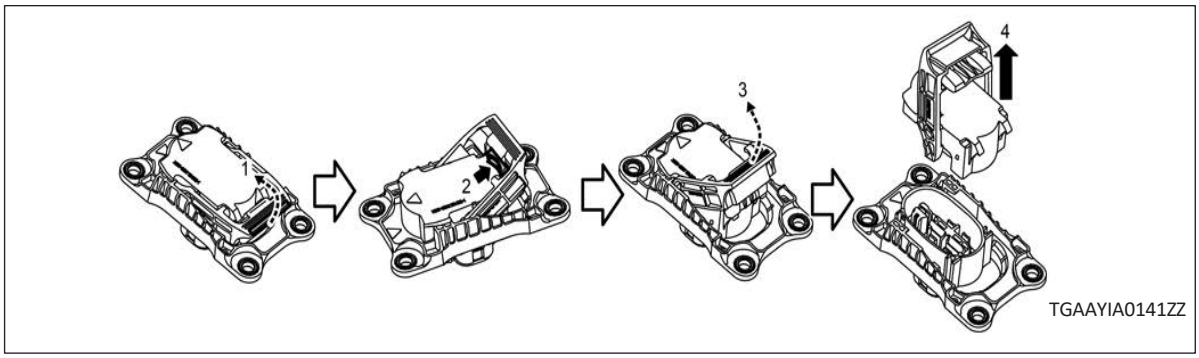
4. Open the zipper (**1**) on the lower front-facing surface of the rear center seat cushion.

   ⇦ : Vehicle front.

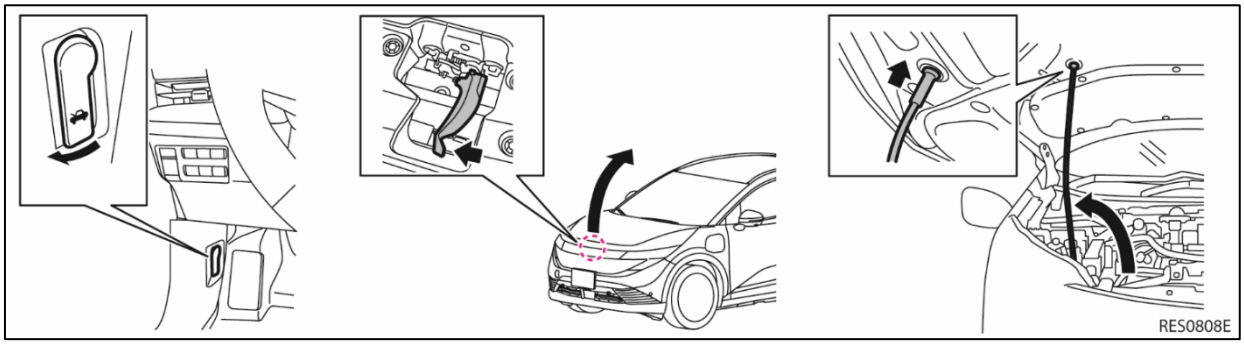


5. Remove the service plug terminal cover mounting bolt (**A**) and lift the cover upward direction and remove the service plug terminal cover.

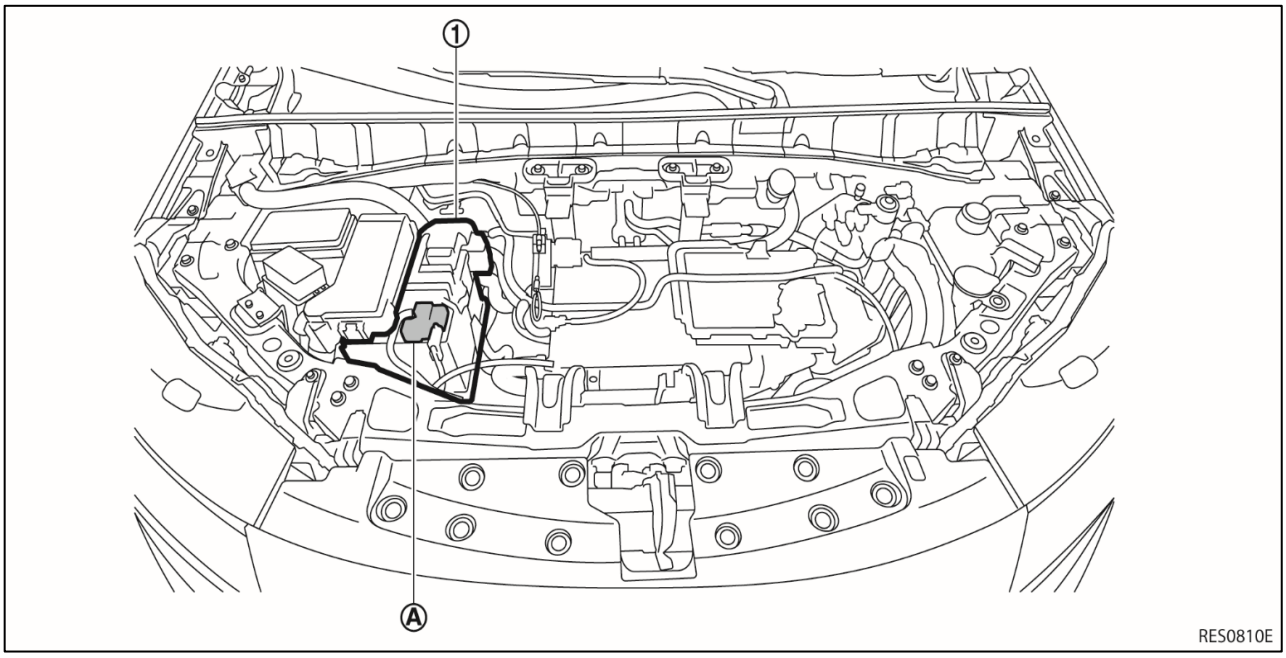
6. Remove the service plug using the following steps: (**1**) push up lever until it stops, (**2**) press pawl to unlock, (**3**) push up lever, (**4**) pull out service plug.



7. **Wait at least (10) minutes for complete discharge** of the high-voltage capacitor after the service plug has been removed.
8. Open the hood.



9. Disconnect the 12V battery (**1**) negative (-) cable (**A**). Insulate the negative (-) battery cable terminal with insulated tape.



10. The vehicle is now ready for storage.

8-3 Preparation for Dismantling

⚠ DANGER

- **Failure to properly shut down the high-voltage electrical system before the Dismantling Procedures are performed will result in serious injury or death from electrical shock. To prevent serious injury or death, NEVER touch high-voltage harnesses or components without always wearing appropriate Personal Protective Equipment (PPE).**
- **If it is necessary to touch any of the high-voltage harnesses or components you must always wear appropriate PPE to avoid electrical shock. Shut down the high-voltage system by following the steps outlined in 8-3.4 High-voltage System Shut-Down Procedures (ERG–62). Wait at least ten (10) minutes for complete discharge of the high-voltage capacitor after the high-voltage system has been shut down.**

⚠WARNING

- **NEVER assume the LEAF is shut OFF simply because it is quiet.**
- **If it becomes necessary for the dismantler to leave the vehicle, place a "DANGER" sign (for example, refer to 8-2.1 Danger Sign Example (ERG–53)) on the vehicle to alert other people that the vehicle contains a high-voltage battery.**
- **If the READY indicator or charging indicator are ON, the high-voltage system is active.**
- **If possible, be sure to verify that the READY indicator on the instrument cluster is OFF and the high-voltage system is stopped.**

8-3.1 Discharging Procedures

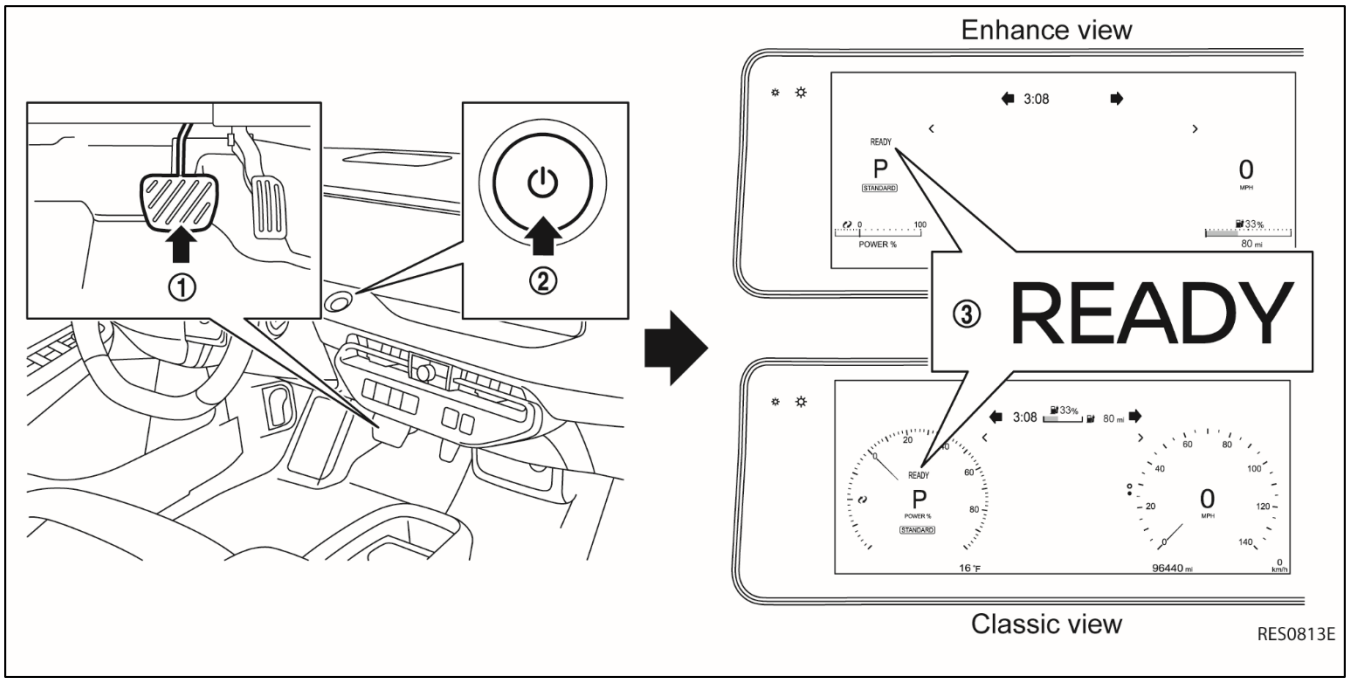
⚠ DANGER

Do not perform this procedure if the high-voltage battery is damaged. If you are unsure of battery damage, use extreme caution and always wear appropriate Personal Protective Equipment (PPE) when working on high-voltage components.

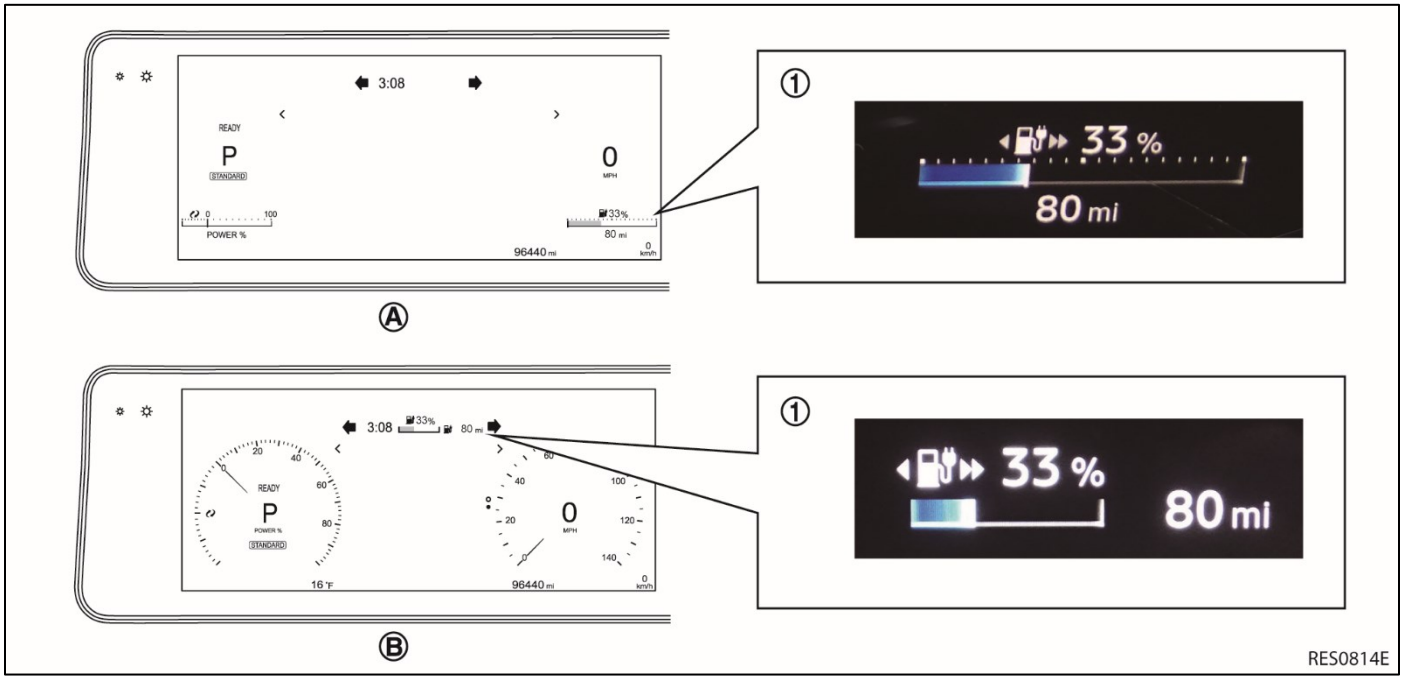
High-voltage battery discharging must take place before dismantling. Sufficient discharging can be achieved by following these steps.

1. Place the selector lever into the Park (P) position.
2. Apply the parking brake.
3. Set wheel chocks to ensure the vehicle is completely immobilized.

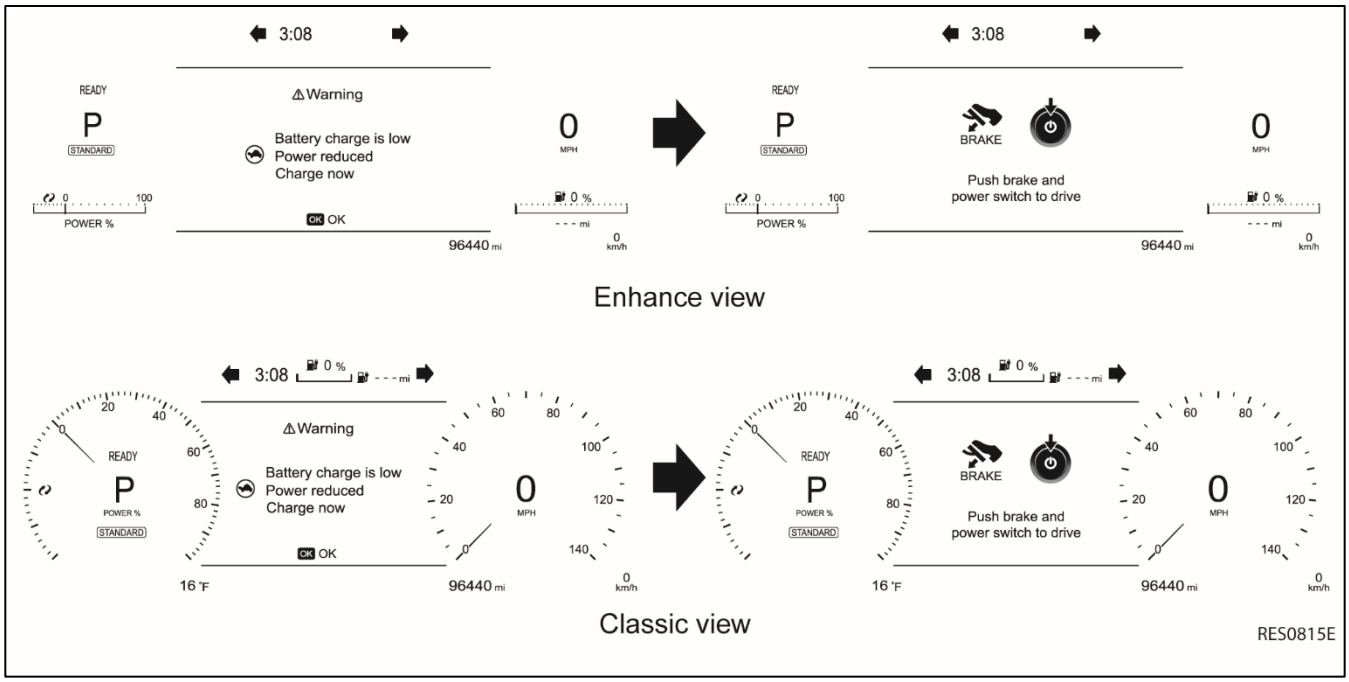
4. Apply brake pedal (**1**) and press the power switch (**2**) to turn the system ON. Confirm READY indicator (**3**) in instrument cluster turns ON.



5. Turn ON electric devices such as headlamps, cabin heater (set to the highest temperature and maximum fan speed; do not use AUTO A/C setting), navigation system and rear window defroster to discharge the high-voltage battery.
6. Monitor high-voltage battery available charge gauge (**1**) in the vehicle information display. (**A**) Enhance view (**B**) Classic view.



7. Discharge is complete when the READY READY indicator and orange electric vehicle (EV) system warning indicator both turn off and message is displayed "Push brake and power switch to drive".



8. Press the power switch to turn the system OFF.

8-3.2 Preparation Items

Preparation Items	Specification	Purpose
Personal Protective Equipment (PPE): Insulated gloves	Up to 1,000V	For protection from high-voltage electrical shock
Insulated shoes	–	
Safety shield	–	
Leather gloves	Must be able to fasten tight around the wrist (worn over insulated gloves).	To protect insulated gloves
Wrenches	Size: varied	To remove battery and associated parts
Solvent resistant protection gloves	–	To utilize in the event of a high-voltage battery

Solvent resistant protection shoes	–	electrolytic solution leak.
Absorbent pad	The same pad used for internal combustion engine fluids can be used.	To absorb any high-voltage battery electrolytic solution leakage.
Standard fire fighting equipment	Standard fire fighting equipment Depending on type of fire (vehicle or battery) use standard fire fighting equipment (water or extinguisher).	To extinguish a fire.
Insulated tape	Insulating	To cover any damaged harnesses to protect from and prevent electrical shock. Tape should cover all bare or damaged wire.

8-3.3 Personal Protective Equipment (PPE) and Insulated Tools

Personal Protective Equipment (PPE) Protective Wear Control

Perform an inspection of the Personal Protective Equipment (PPE) items before beginning work. Do not use any damaged PPE items.

Daily Inspection

This inspection is performed before and after use. The responder who will be using the items should perform the inspection and check for deterioration and damage.

- Insulated rubber gloves should be inspected for scratches, holes and tears. (Visual check and air leakage test)
- Insulated safety boots should be inspected for holes, damage, nails, metal pieces, wear or other problems on the soles. (Visual check)
- Insulated rubber sheet should be inspected for tears. (Visual check)

Insulated Tools

When performing work at locations where high-voltage is applied (such as terminals), use insulated tools meeting 1,000V/300A specifications.

8-3.4 High-voltage System Shut-Down Procedures

Once the high-voltage battery is properly discharged, any of the following procedures can shut down and isolate the high-voltage system. The dismantling operation can only begin after shutting down the high-voltage system. If the vehicle is heavily damaged, for example the high-voltage battery is deformed, broken or cracked, appropriate Personal Protective Equipment (PPE) must always be used and the high-voltage battery and high-voltage components must not be touched.

⚠ DANGER

- **⚠ Failure to properly shut down the high-voltage system before the dismantling procedures are performed will result in serious injury or death from electrical shock. To prevent serious injury or death, NEVER touch high-voltage harnesses or components without always wearing appropriate Personal Protective Equipment (PPE). PPE must always be worn when touching or working on high-voltage components**
- **⚠ When contact with high-voltage components or high-voltage harnesses is unavoidable, or when there is risk of such contact, you must always wear appropriate PPE. PPE must always be worn when touching or working on high- voltage components.**

⚠WARNING

- **⚠ If the charge connector is connected to the vehicle, remove it. Refer to 3-2.1 Removing the Charge Connector (ERG–18).**
- **⚠ The vehicle contains parts that contain powerful magnets. If a person who is wearing a pacemaker or other medical device is close to these parts, the medical device may be affected by the magnets. Such persons must not perform work on the vehicle.**
- **Be sure to verify that the READY indicator is off and the high-voltage system is stopped.**
- **After the high-voltage system is shut down, please wait at least ten (10) minutes for complete discharge of the high-voltage capacitor. While waiting, do not operate any vehicle functions.**
- **After shutting down the high-voltage system and removing the 12-volt battery negative (-) terminal, wait at least three (3) minutes to discharge the air bag capacitor. Even though the 12-volt battery negative (-) is disconnected, the Supplemental Restraint System (SRS) air bag maintains voltage at least three (3) minutes. During this time, there is a possibility of sudden SRS air bag inflation due to harness short circuit or damage and it may cause serious injuries.**
- **Always shut down the high-voltage system before disconnecting the 12-volt battery. Not doing so may result in serious injury or death from electrical shock.**
- **The 12V system will remain active even after the 12-volt battery negative (-) terminal is removed while the high-voltage system is active. The high-voltage system is active during any of the following conditions:**
- **grille emblem illumination is turned ON**
- **charging indicator is turned ON**
- **READY indicator is turned ON**

Refer to 1-1.2 Interior Component Location (ERG–04) for location of these indicators. This is because DC/DC converter will not shut down and power will be supplied to the 12V system and high-voltage system continuously.

Powering Down the High-voltage System

The high-voltage system can be shut down with any 1 of the following procedures:

- Turn OFF the power switch **and** disconnect the 12-volt battery. Refer to 3-2.4 Primary Procedure (ERG–20).
- When the power switch cannot be operated due to vehicle damage. Refer to 3-2.5 Alternate Procedure 1 (Cable cut) (ERG–22).
- Remove the service plug and disconnect the 12-volt battery. Refer to 3-2.6 Alternate Procedure 2 (Remove Service Plug) (ERG–23).

8-4 Dismantling Information

Removal or repair of the high-voltage battery requires special tools and specific training. Nissan strongly recommends that only NISSAN certified LEAF dealer technicians perform these operations.

8-4.1 Precautions for Handling High-voltage Battery

⚠ DANGER

- **⚠ Because LEAF contains a high-voltage battery, there is the risk of electric shock, electric leakage, or similar accidents if the high-voltage components or vehicle is handled incorrectly. Be sure to follow the correct work procedures when performing inspection and dismantling.**
- **⚠ If it is necessary to touch any of the high-voltage harnesses or components you must always wear appropriate Personal Protective Equipment (PPE) and properly shut-down the high-voltage system by removing the service plug.**
- **⚠ Be sure to always wear appropriate PPE before beginning work on the high- voltage system.**
- **⚠ Be sure to remove the service plug in order to shut-down the high-voltage system before performing inspection or dismantling of high-voltage system harnesses and parts.**
- **⚠ If the vehicle is heavily damaged, for example the high-voltage battery is deformed, broken, or cracked; appropriate PPE must always be used at all times to avoid electrical shock.**

⚠ WARNING

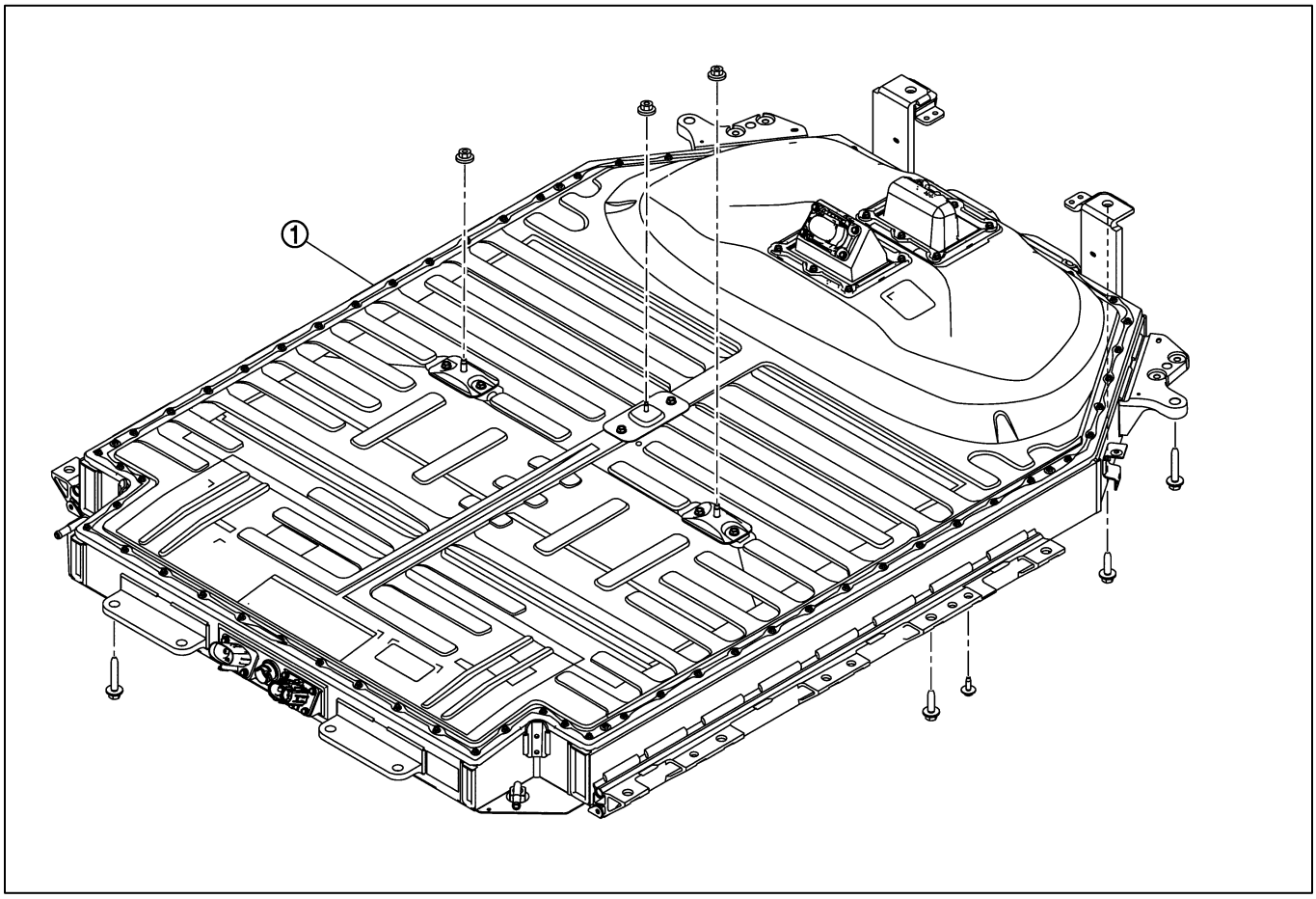
- **⚠ The colors of the high-voltage harnesses and connectors are all orange. Orange "High-voltage" labels are applied to the high-voltage battery and other high- voltage devices. Do not touch the high-voltage battery or other high-voltage devices without always wearing appropriate PPE.**
- **⚠ Clearly identify the persons responsible for high-voltage work and ensure that other persons do not touch the vehicle. When not working, cover high voltage parts with an insulating cover sheet and sign or similar item to prevent other persons from contacting them.**
- **⚠ Be sure to put the removed service plug in your pocket and carry it with you so another person does not accidentally reinstall it while work is in progress.**
- **⚠ The high-voltage battery always retains high-voltage. Personal Protective Equipment (PPE) must always be worn when touching or working on high- voltage components to avoid risk of electrical shock and severe personal injury or death.**
- **⚠ Immediately insulate disconnected high-voltage connectors and terminals with insulated tape.**
- **⚠ The vehicle contains parts that contain powerful magnets. If a person who is wearing a pacemaker or other medical device is close to these parts, the medical device may be affected by the magnets. Such persons must not perform work on the vehicle.**
- **⚠ Because this vehicle uses components that contain high-voltage and powerful magnetism, do not carry any metal products which may cause short circuits, or any magnetic media (cash cards, credit cards, etc.) which may be damaged when working on the vehicle.**
- **⚠ Keep removed high-voltage battery packs away from rain to avoid electric shock.**
- **Do not heat removed battery packs higher than 158° F (70° C).**

⚠ CAUTION

There is the possibility of a malfunction occurring if the vehicle is changed to READY status while the service plug is removed.

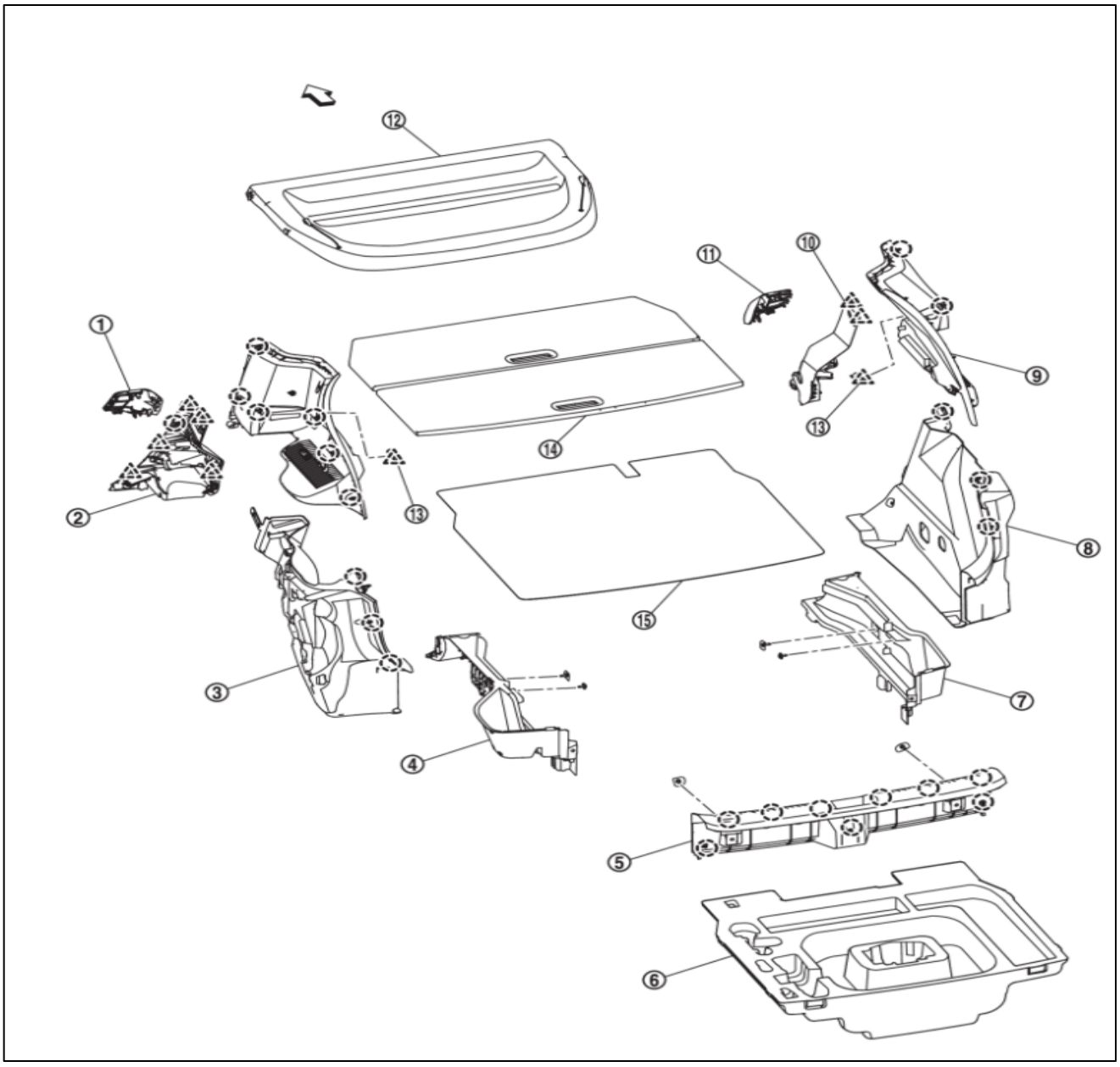
8-4.2 High-voltage Battery Pack Removal

Exploded View: High-voltage battery



1. High-voltage battery

Exploded View: Luggage Trim

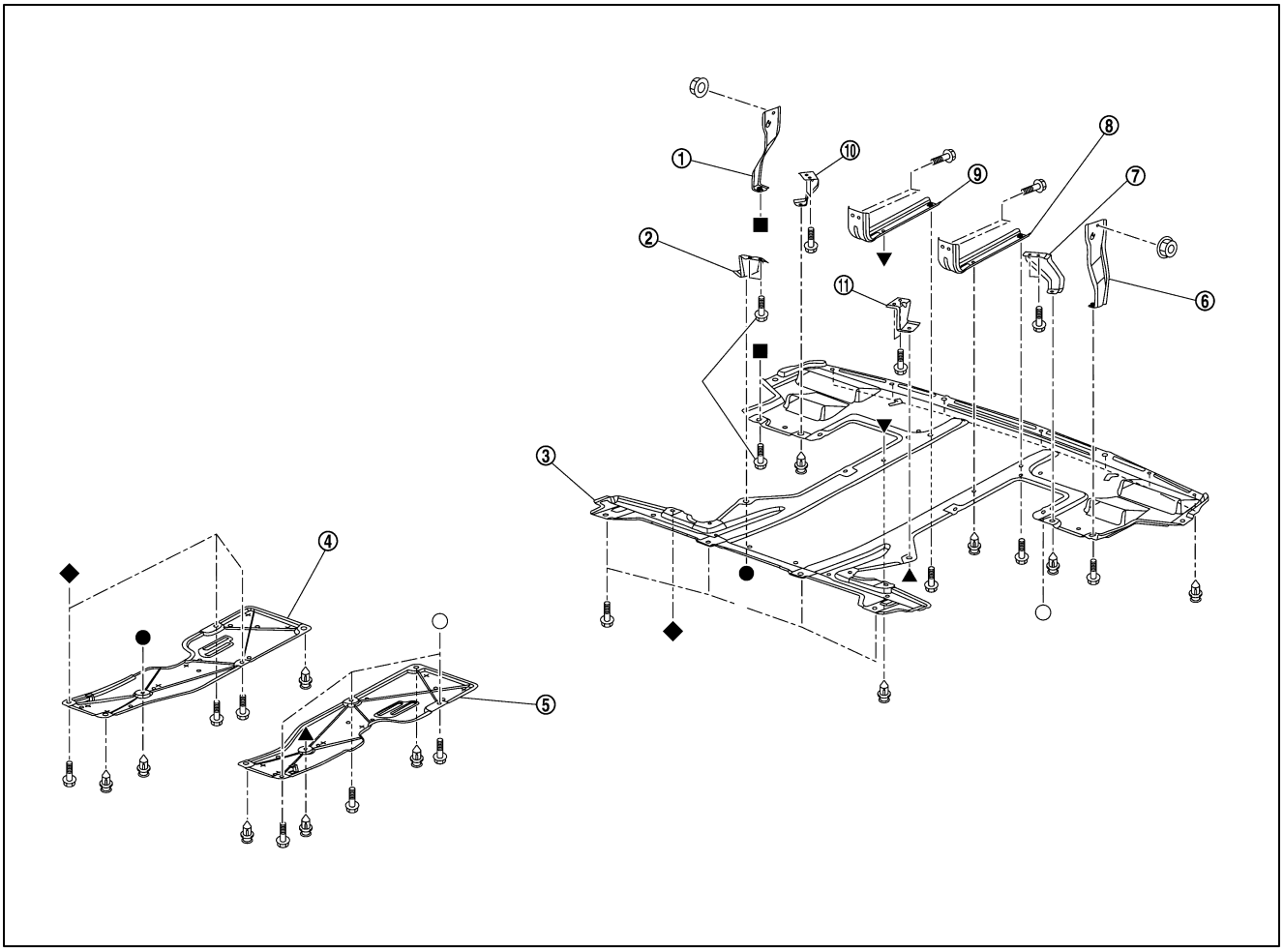


: Vehicle front. Clip : Pawl

1.	Luggage finisher mask left	2.	Luggage side lower finisher left	3.	Luggage floor spacer
4.	Luggage floor carpet	5.	Luggage floor box	6.	Luggage rear plate
7.	Rope hook	8.	Luggage rear plate mask	9.	Luggage side lower finisher right
10.	Luggage room lamp	11.	Luggage finisher mask right	12.	Front center luggage floorboard
13.	Luggage belt	14.	Luggage side lower bracket	15.	Rear center luggage floorboard

●,▲: Indicates that the part is connected at points with same symbol in actual vehicle.

Exploded View: Rear Diffuser



1.	Rear diffuser bracket A right	2.	Rear diffuser bracket B right	3.	Rear diffuser
4.	Rear side diffuser right	5.	Rear side diffuser left	6.	Rear diffuser bracket A left
7.	Rear diffuser bracket C left	8.	Rear diffuser bracket D left	9.	Rear diffuser bracket D right
10.	Rear diffuser bracket C right	11.	Rear diffuser bracket B left	.	

●,▲,■,▼,◆,○: Indicates that the part is connected at points with same symbol in actual vehicle.

Removal

DANGER

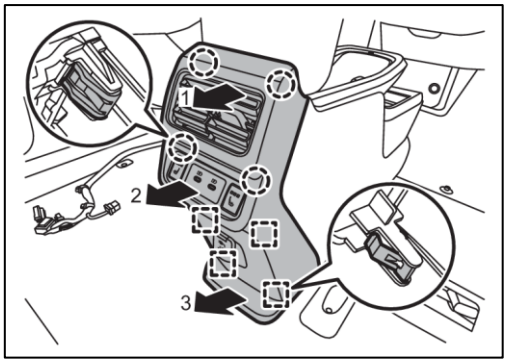
NEVER disassemble or open the high-voltage battery to avoid severe personal injury or death by electrical shock.

1. Discharge the high-voltage battery. Refer to 8-3.1 Discharging Procedures (ERG–59).
2. Remove coolant reservoir tank cap.
3. Remove center console finisher rear.

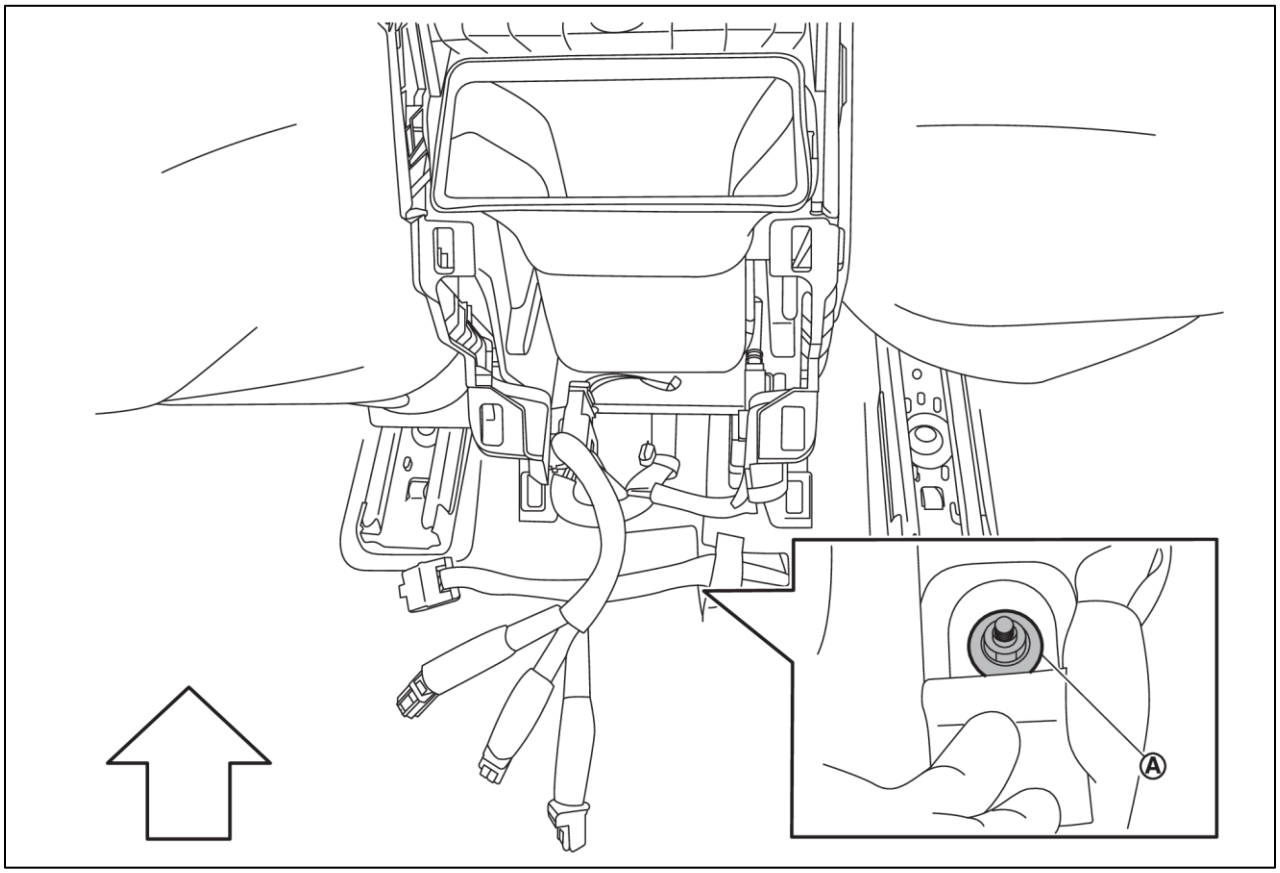
   a. Fully open center console lid.

   b. Disengage fixing clips and metal clips according to the numerical order 1→3 indicated by arrows as shown in figure, and then remove center console rear finisher.

   : Clip
   : Metal clip

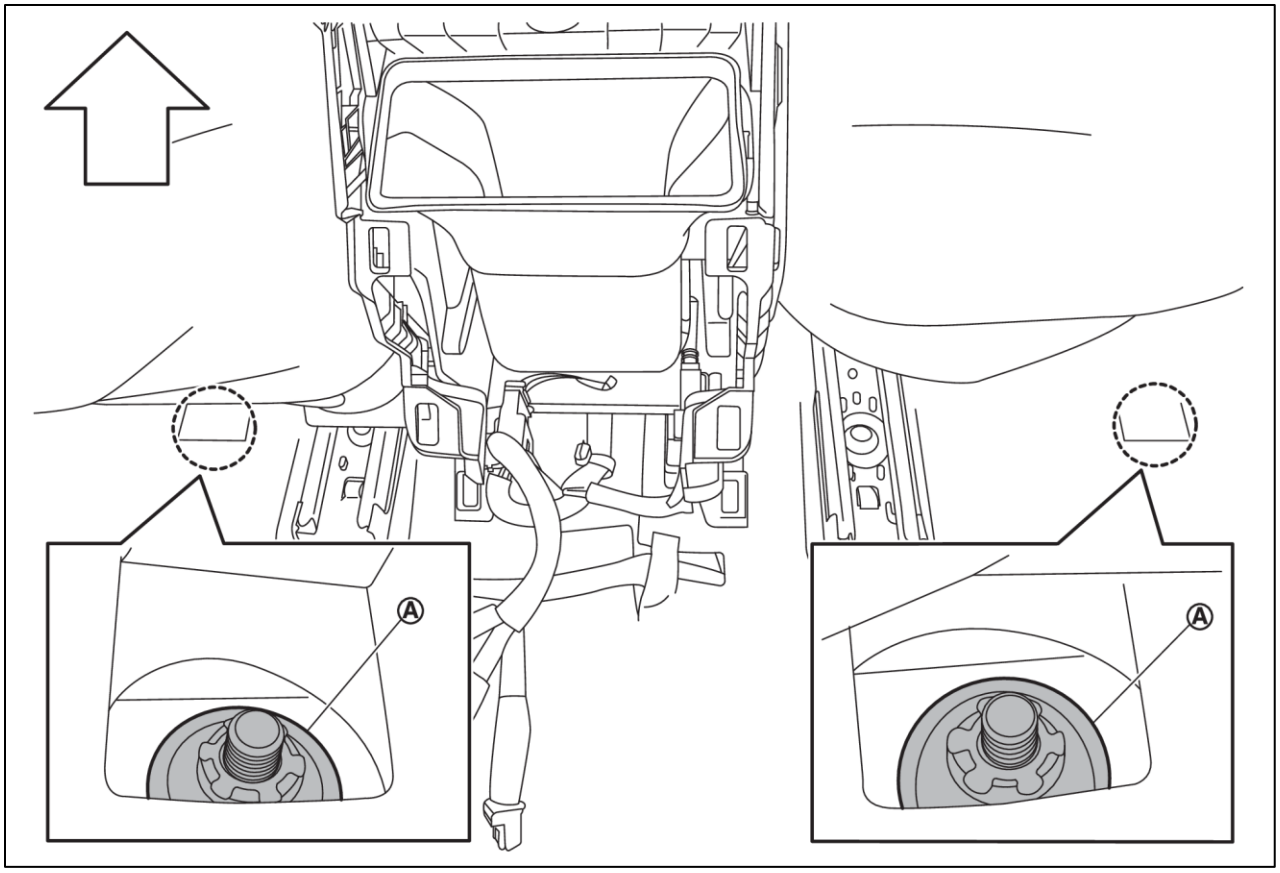


4. Turn over floor carpet and remove high-voltage battery mounting nut (**A**).



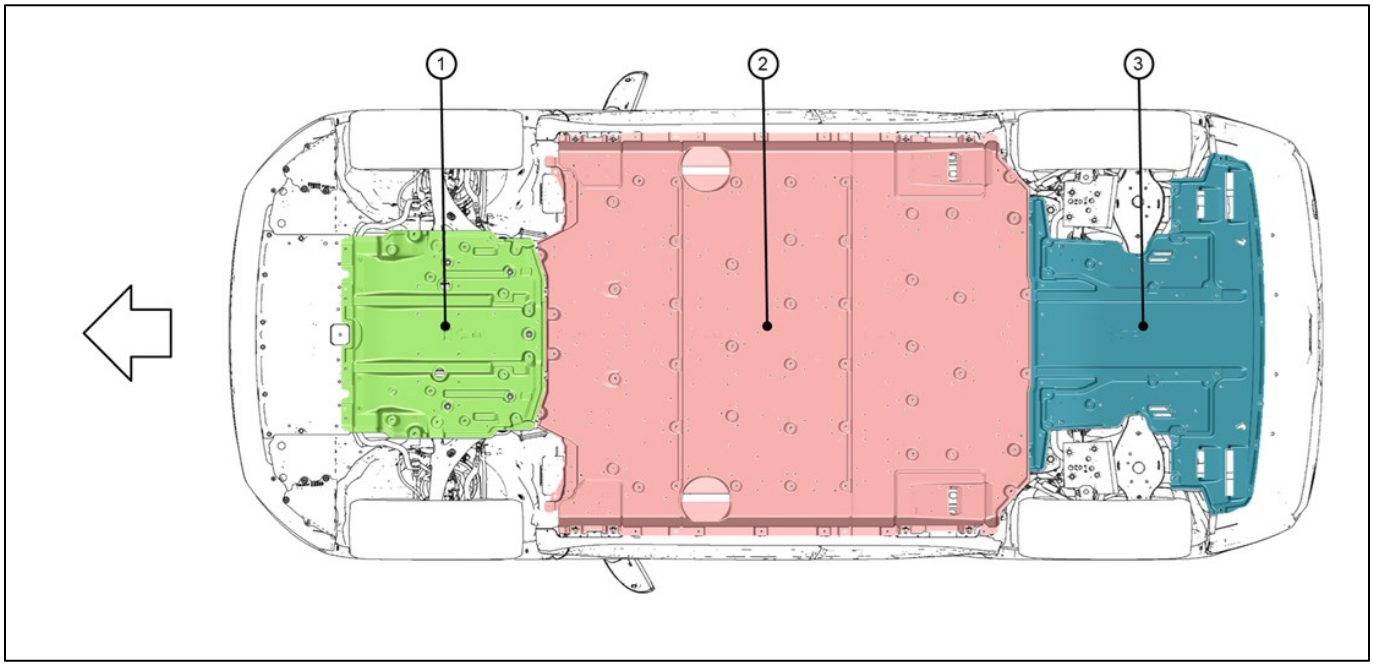
: Vehicle front.

5. Turn over floor carpet and remove high-voltage battery mounting bolts (**A**).



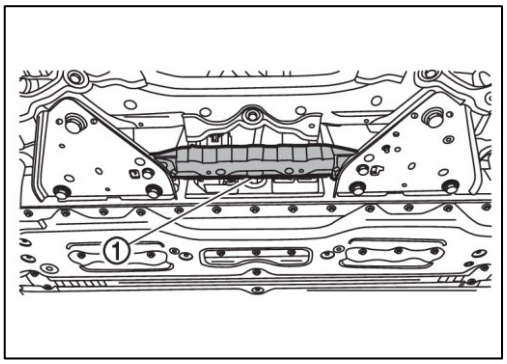
⇦ : Vehicle front.

6. Remove road wheels and tires. (If possible)
7. Turn over rear wheelhouse protector to ensure it will not interfere with the work.
8. Remove front under cover rear (**1**), floor under cover (**2**) and rear diffuser (**3**).



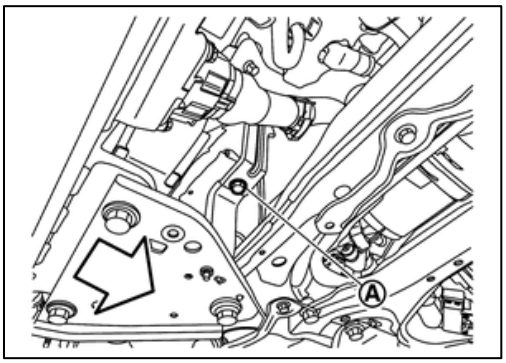
⇦ : Vehicle front.

9. Drain high-voltage coolant from high-voltage cooling system.
10. Disconnect each hose connected to the high-voltage battery.
11. Remove reinforce (**1**).



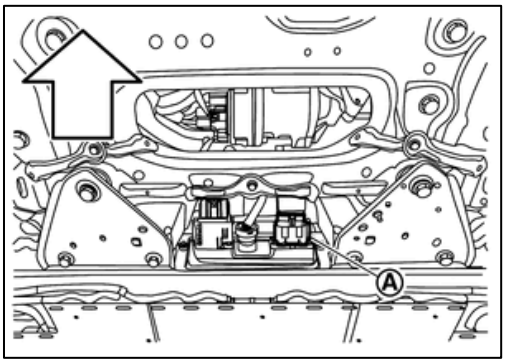
: Vehicle front.

12. Remove high-voltage harness bracket mounting bolt (**A**) of inverter side.



: Vehicle front.

13. Remove high-voltage harness connector (**A**) of inverter side.



: Vehicle front.

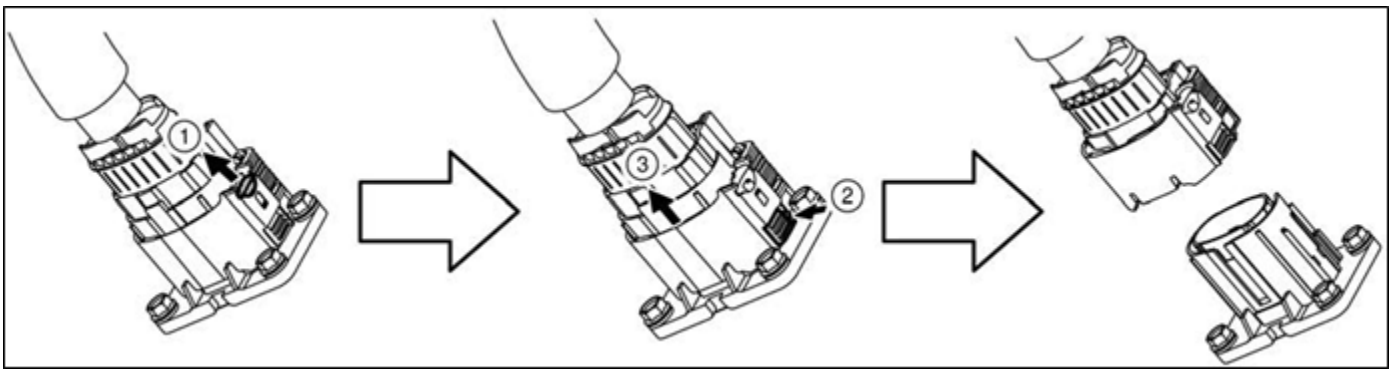
DANGER

Touching high-voltage components without wearing appropriate Personal Protective Equipment (PPE) will cause electrocution.

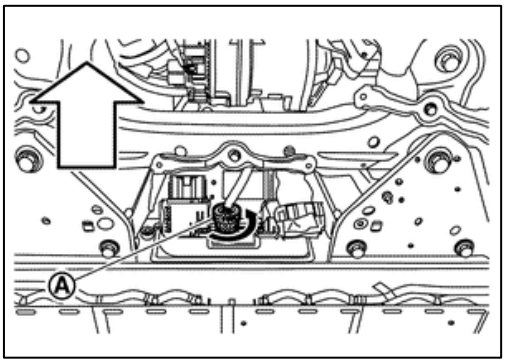
DANGER

To prevent electrocution, cover battery side of high- voltage connector with insulated tape.

a. Remove high-voltage harness connector by the following procedure. (**1**) to (**3**).



14. Remove vehicle communication harness connector (**A**) from the high-voltage battery by turning it counterclockwise.

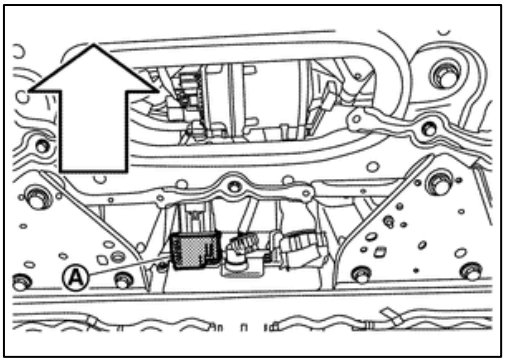


⚠ DANGER

Touching high-voltage components without wearing appropriate Personal Protective Equipment (PPE) will cause electrocution.

: Vehicle front.

15. Remove high-voltage harness connector (**A**) of quick charge port.

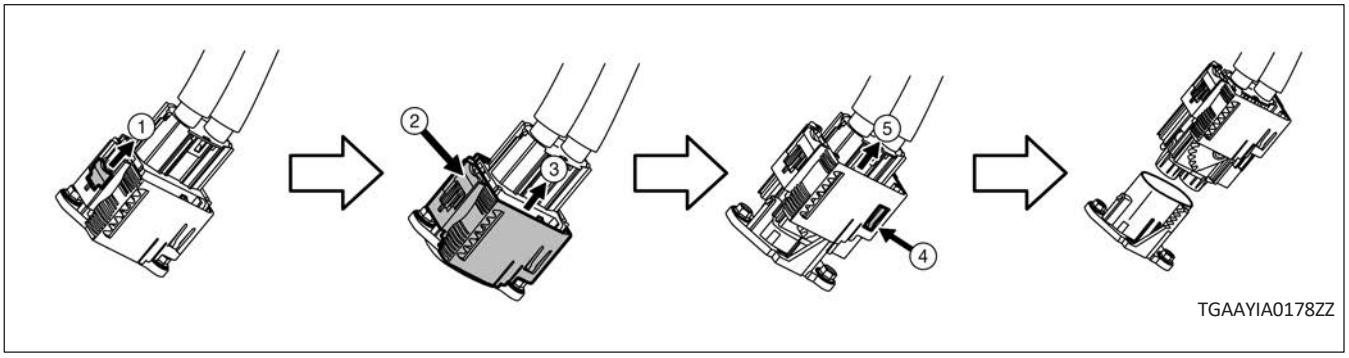


⚠ DANGER

Touching high-voltage components without wearing appropriate Personal Protective Equipment (PPE) will cause electrocution.

: Vehicle front.

a. Remove high-voltage harness connector of quick charge port by the following procedure (**1**) to (**5**).

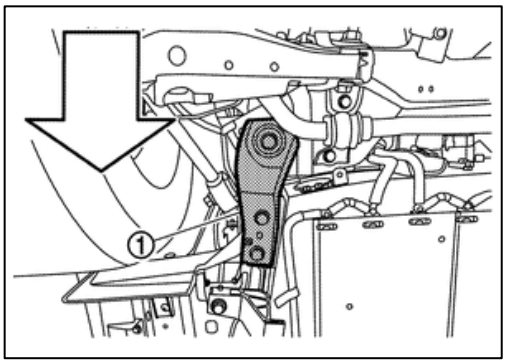


⚠ DANGER

To prevent electrocution, cover battery side of high-voltage connector with insulated tape.

16. Remove left member stay (rear side) (**1**).

: Vehicle front.



DANGER

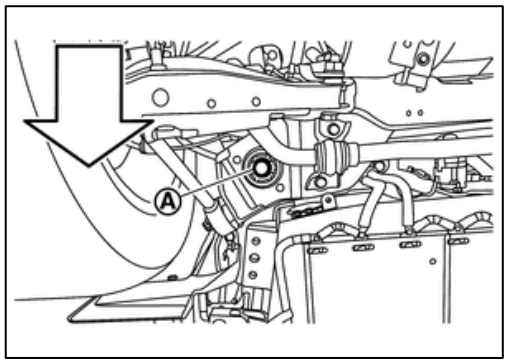
Touching high-voltage components without wearing appropriate Personal Protective Equipment (PPE) will cause electrocution.

DANGER

Never remove mounting bolts of driver side member stay (rear side) and passenger member stay (rear side) at the same time together.

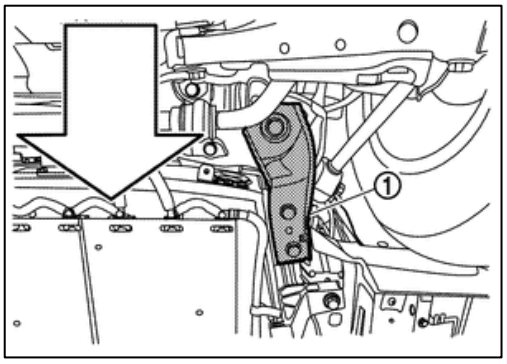
17. Install left member stay (rear side) mounting bolt (**A**) while left member stay (rear side) is removed.

: Vehicle front.



18. Remove right member stay (rear side) (**1**).

: Vehicle front.

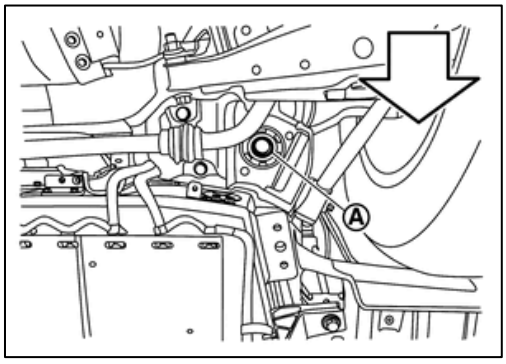


DANGER

Touching high-voltage components without wearing appropriate Personal Protective Equipment (PPE) will cause electrocution.

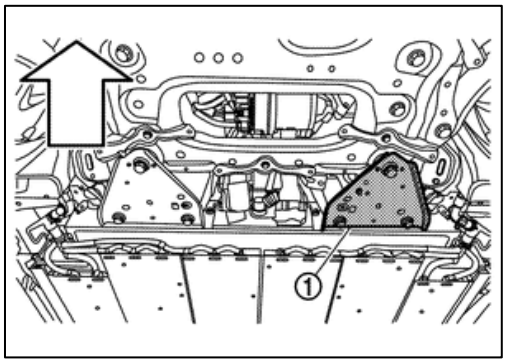
19. Install right member stay (rear side) mounting bolt (**A**) while right member stay (rear side) is removed.

: Vehicle front.



20. Remove left member stay (front side) (**1**)

: Vehicle front.

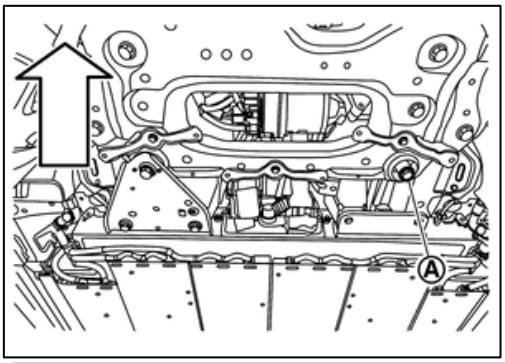


DANGER

Touching high-voltage components without wearing appropriate Personal Protective Equipment (PPE) will cause electrocution.

DANGER

Never remove mounting bolts of driver side member stay (front side) and passenger side member stay (front side) at the same time together.

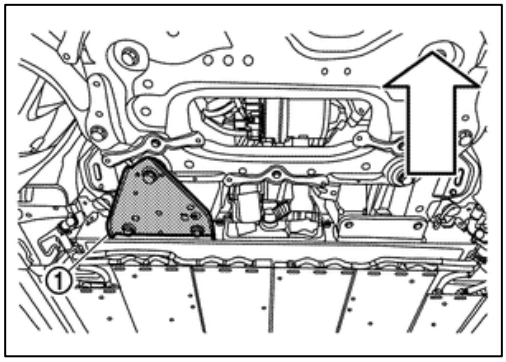


21. Install left member stay (front side) mounting bolt (**A**) while left member stay (front side) is removed.

: Vehicle front.

22. Remove right member stay (front side) (**1**).

: Vehicle front.

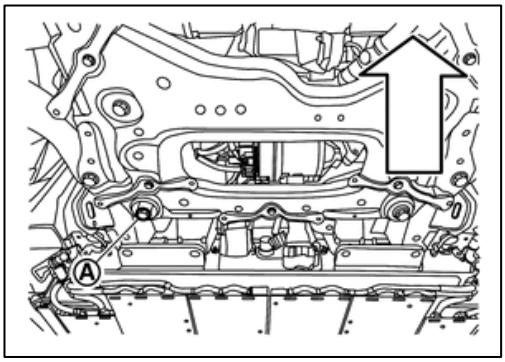


DANGER

Touching high-voltage components without wearing appropriate Personal Protective Equipment (PPE) will cause electrocution.

23. Install right member stay (front side) mounting bolt (**A**) while right member stay (front side) is removed.

: Vehicle front.

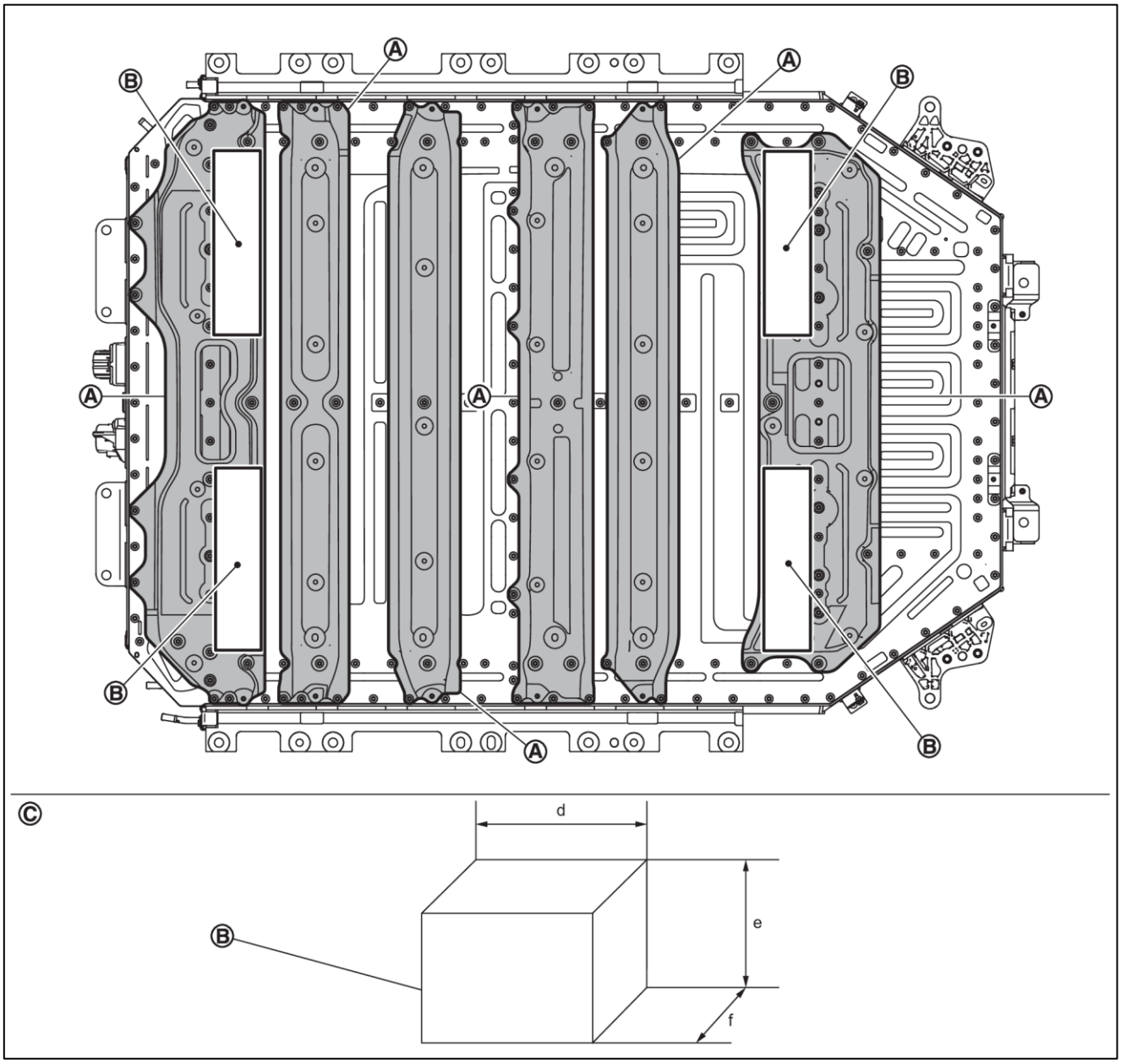


24. Remove rear diffuser bracket B.
Refer to Exploded View: Rear Diffuser (ERG-67).
25. Remove rear stabilizer clamp bolts (**A**) and move stabilizer bar (**1**).

26. Set battery lift table to high-voltage battery, paying attention to the followings;

CAUTION

- **Place urethane block or rubber block in the position shown in the figure between battery lift table and high-voltage battery.**
- **Be sure to install urethane blocks or rubber blocks so that it straddles 0.39 in (10 mm) or more on both the left and right sides of the reinforcement bracket.**



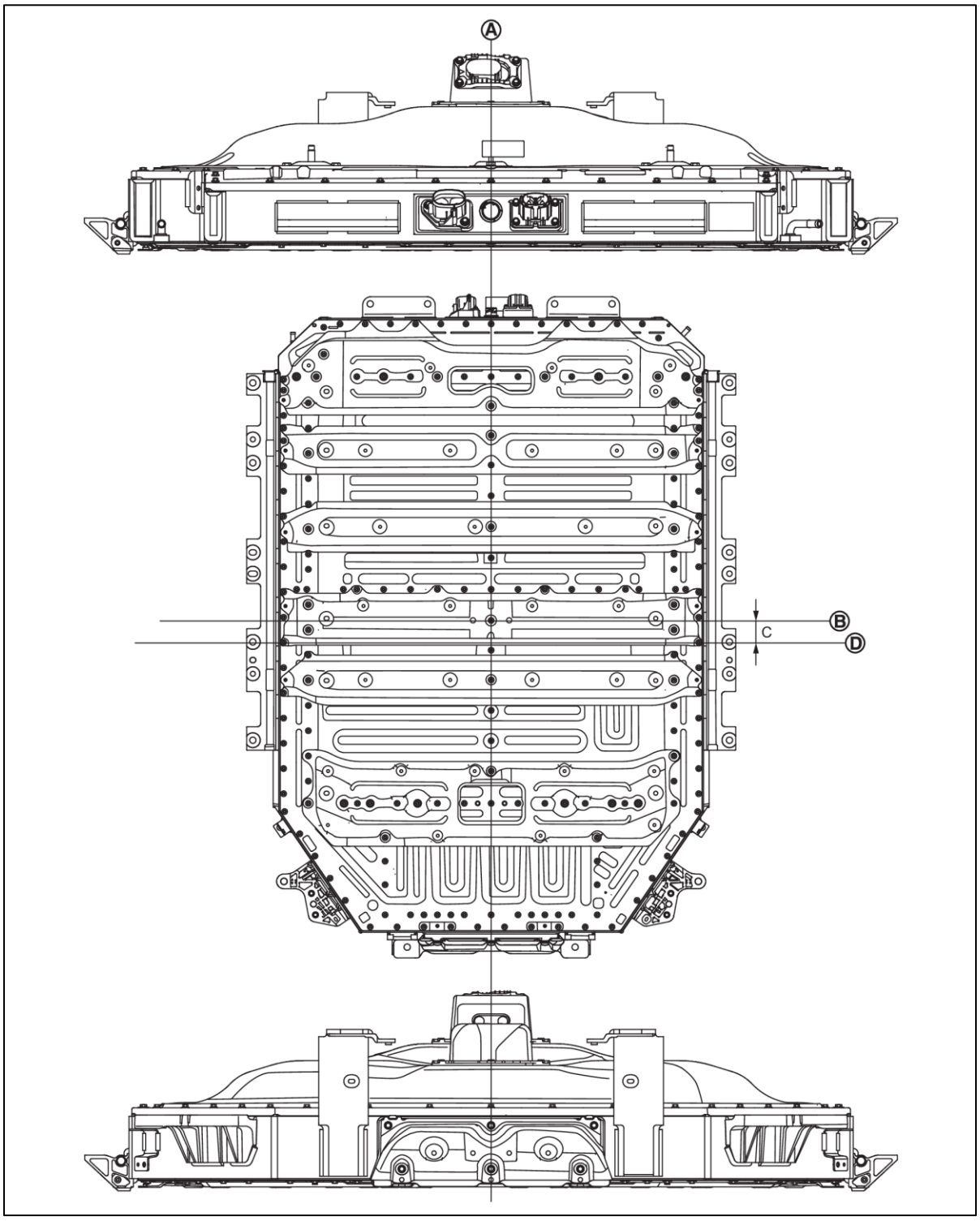
(A) : Reinforcement bracket
(B) : Block
(C) : Urethane block or rubber block dimensions
d : Horizontal 180 mm (7.09 in) or more
e : Height 150 mm (5.91 in)
f : Vertical 80 mm (3.15 in) or more

⚠CAUTION

After lowering manual lift table caddy, set urethane blocks or rubber blocks, so that claw of hand lifter can be inserted to high-voltage battery.

NOTE:
Add a block to the reinforcement brackets if necessary.

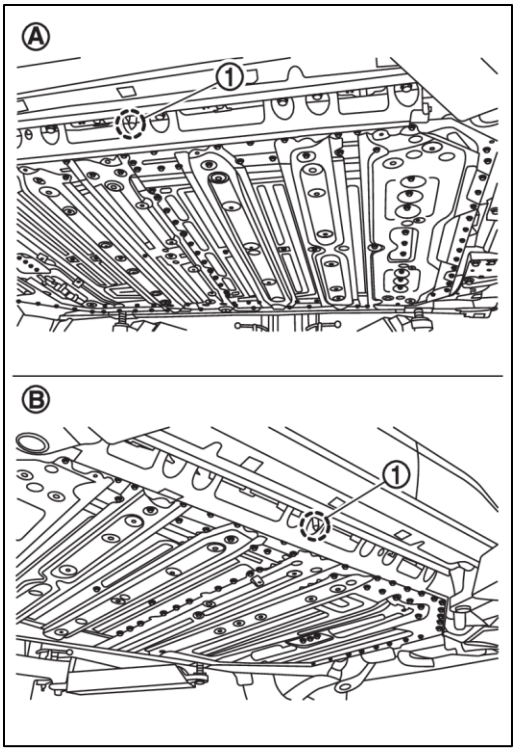
27. Align the battery lift table center mark with the center of gravity of high-voltage battery.



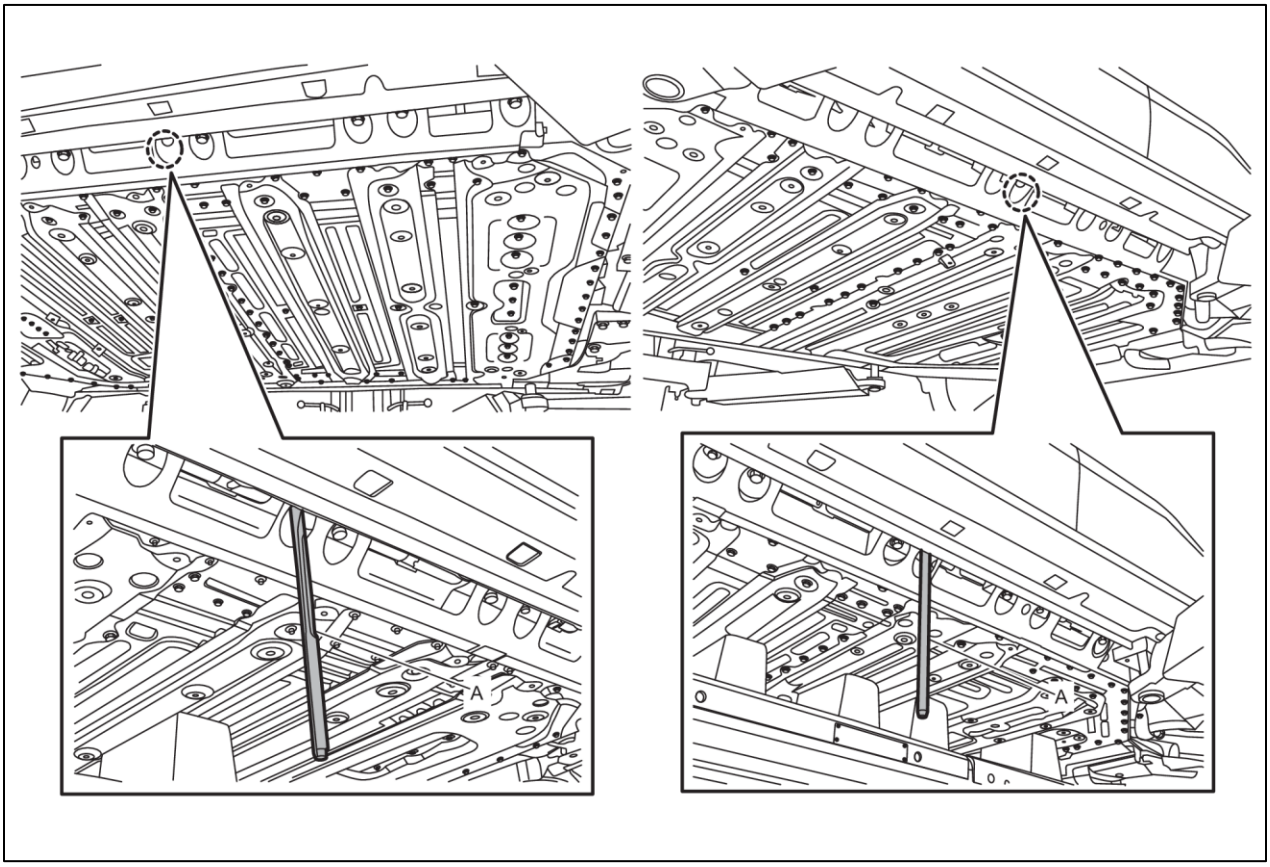
(A) : High-voltage battery left and right center of gravity
(B) : High-voltage battery front and rear center of gravity
(C) : 56.0 mm (2.205 in)
(D) : Center of mounting hole for high-voltage battery

28. Remove locate pin (**1**).

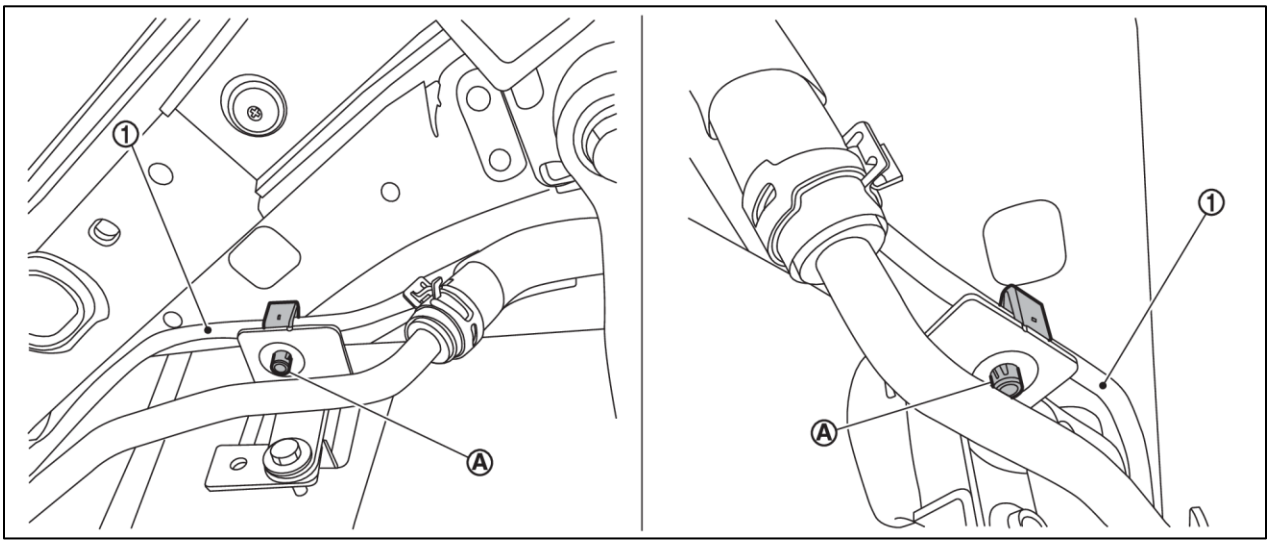
(A) : RH
(B) : LH



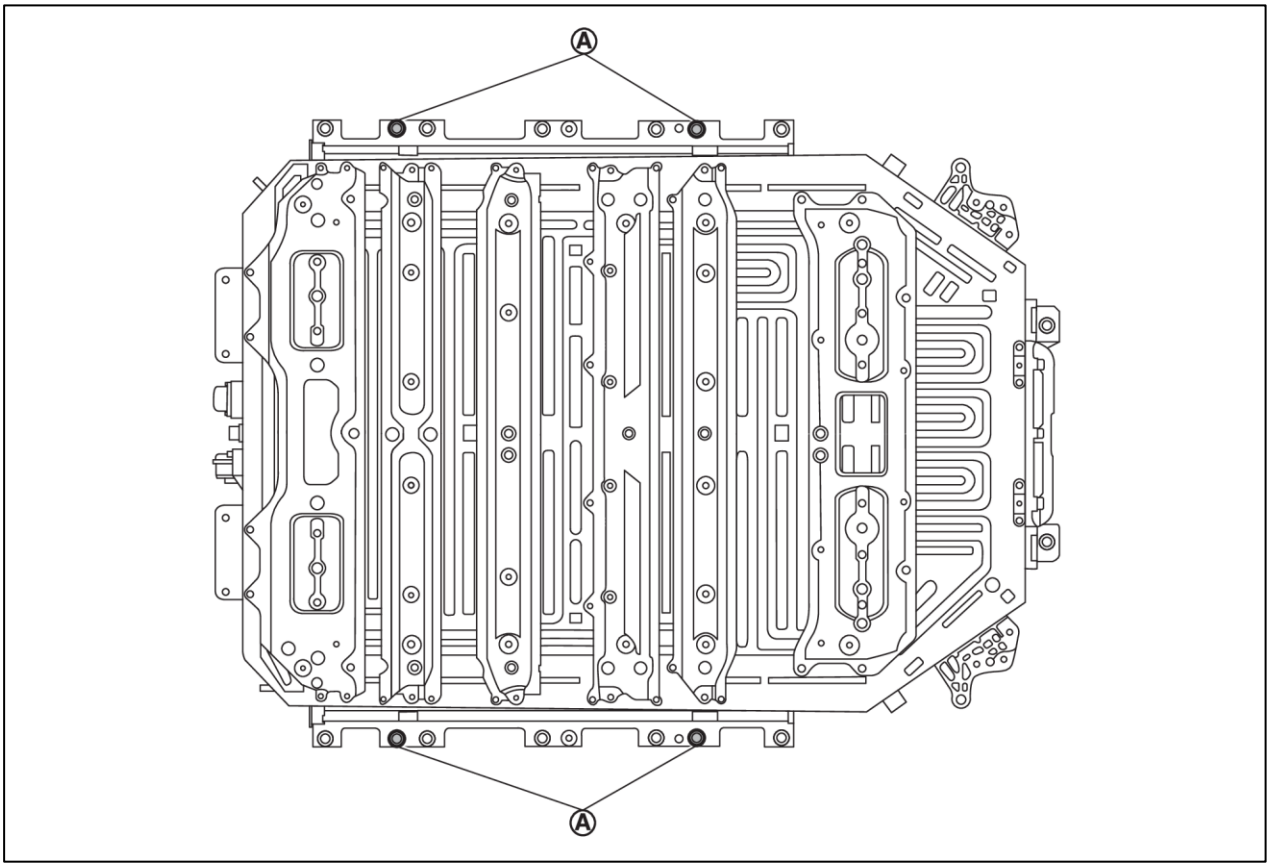
29. Install locate pin (**A**) in the position from which the vehicle-side locate pin was removed.



30. Remove left and right brake tube (**1**) mounting clip (**A**).



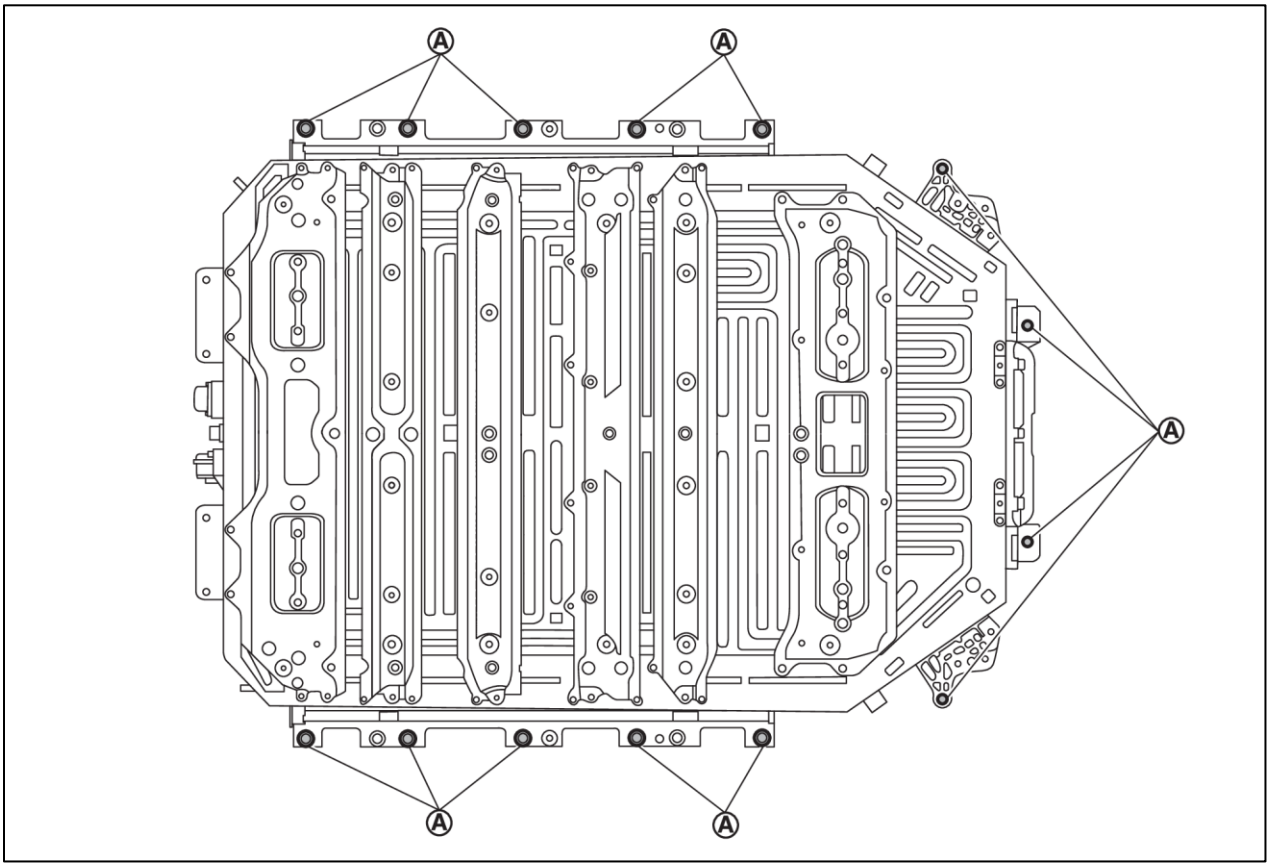
31. Remove ground bolts (**A**).



DANGER

Touching high-voltage components without wearing appropriate Personal Protective Equipment (PPE) will cause electrocution.

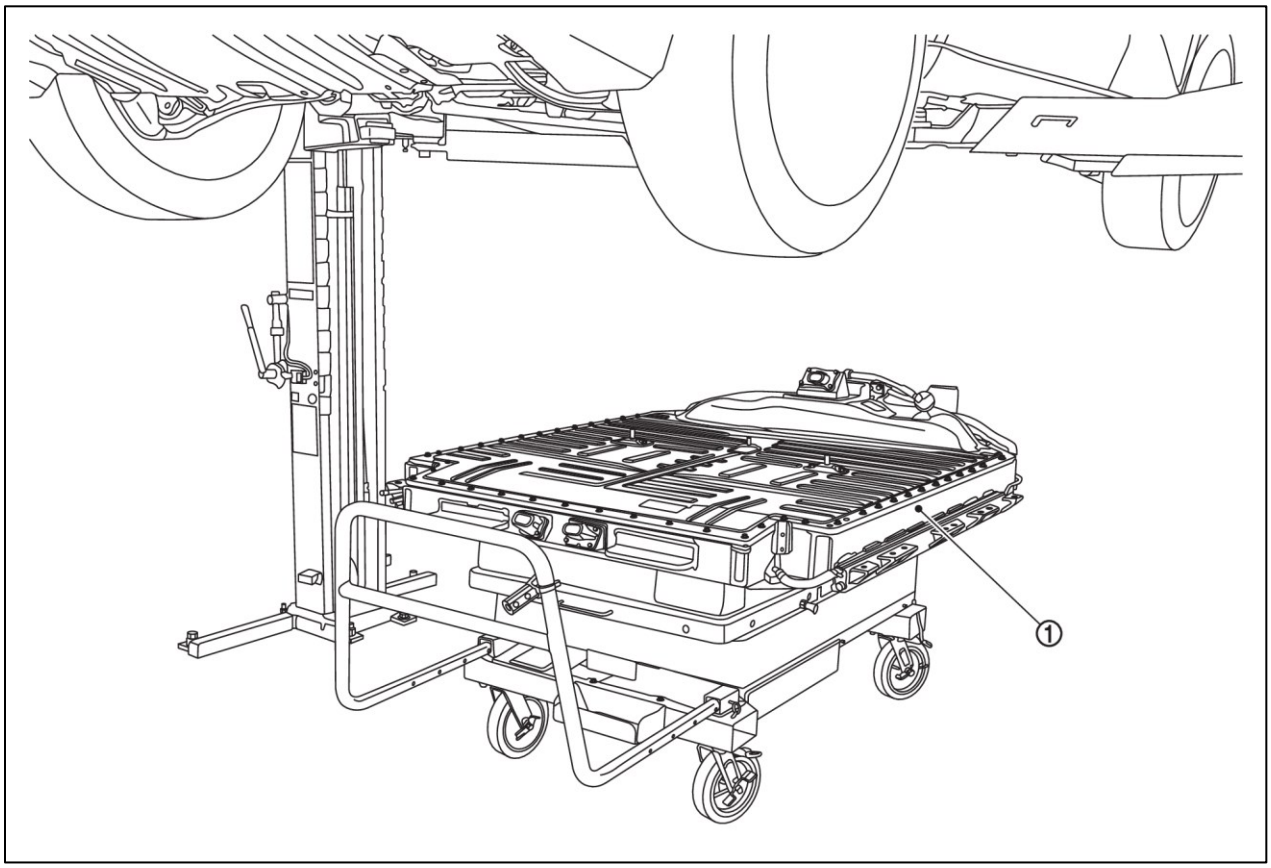
32. Remove mounting bolts (**A**).



DANGER

Touching high-voltage components without wearing appropriate Personal Protective Equipment (PPE) will cause electrocution.

33. Lower battery lift table and remove high-voltage battery (**1**) from vehicle.



9. Important Additional Information

9-1 Recovery/Recycling of the High-voltage Battery

The high-voltage battery is fully recyclable. For information regarding safe recovery and recycling of the high-voltage battery, it is recommended you contact the nearest NISSAN certified LEAF dealer.

10. Explanation of Pictograms Used

10-1 Explanation of Pictograms Used

This manual describes emergency response operations and **important safety** related warnings for this vehicle.

This vehicle is an electrically driven car equipped with a high-voltage battery pack. **Failure to follow recommended practices during emergency responses will cause death or serious personal injury.**

Please read this manual in advance in order to understand the features of this vehicle and to help you deal with incidents involving this vehicle. Follow the procedures in order to help assure a safe and successful first response operation.

IMPORTANT INFORMATION ABOUT THIS MANUAL

You may see various symbols in this manual. They have the following meanings:

⚠ DANGER

This symbol is used to inform you of an operation which will result in death or serious personal injury if instructions are not followed.

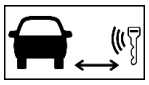
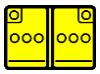
Example: Touching high-voltage components without using the appropriate protective equipment will result in electrocution.

⚠WARNING

This symbol is used to inform you of an operation which may cause death or serious personal injury if instructions are not followed.

⚠CAUTION

This symbol is used to inform you of an operation which may cause personal injury or component damage if instructions are not followed.

	Remove smart key		Electric Vehicle
	Warning, electricity		Flammable
	General warning sign		Hazardous to the human health
	Warning, low temperature		Acute toxicity
	High voltage device that disconnects high voltage		Cable cut
	Air-conditioning component		Corrosives
	Battery pack, high voltage		Use ABC powder to extinguish the fire
	Use water to extinguish the fire		Explosives
	Use thermal infrared camera		Bonnet
	Seat adjustment, longitudinal		Boot
	Seat height adjustment		Steering wheel, tilt control
	Battery low voltage		

Please note that there may be differences between this manual and the vehicle specification due to specification changes.