2023 NISSAN LEAF ELECTRIC

Emergency Response Guide

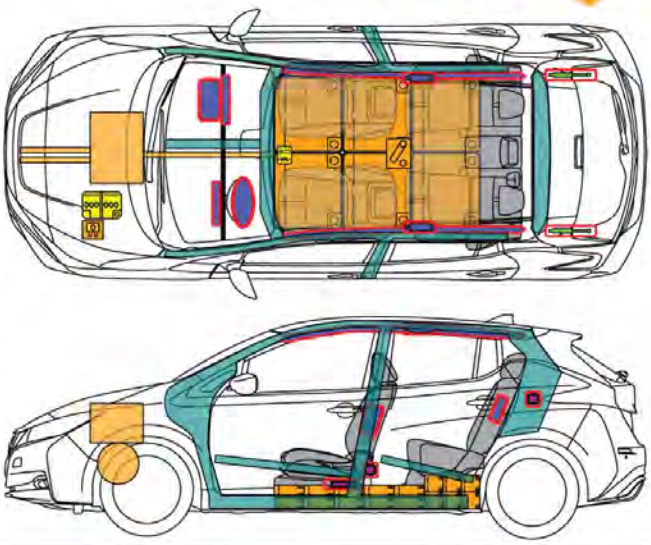
INFORMATION FOR FIRST AND SECOND RESPONDERS



NISSAN

LEAF
(2023 -)





Airbag/Sac gonflable/Bolsa de aire	Stored gas inflator/ Dispositif de gonflage à gaz stocké/Inflador de gasolina almacenado	Seat belt pretensioner/ Prétendeur de ceinture de sécurité/Pretensor del cinturón de seguridad	SRS control unit/Module de commande du système de retenue supplémentaire/ Unidad de control de sistema de sujeción suplementario	Pedestrian protection active system/Système actif de détection de piétons/Sistema activo de protección peatonal
Automatic rollover protection system/Système de protection de reversement automatique/ Sistema de protección automática contra volcaduras	Gas strut or Preloaded spring/ Jambe de force à gaz ou ressort préchargé/Columna de gasolina o resorte precargado	High strength zone/Zone à haute résistance/Zona de alta resistencia	Zone requiring special attention/Zone nécessitant une attention particulière/ Zona que requiere atención especial	
Battery low voltage/Batterie à basse tension/Voltaje bajo del acumulador	Ultra capacitor, low voltage/ Supercondensateur, basse tension/Ultracapacitor, bajo voltaje	Fuel tank/Réservoir de carburant/Tanque de combustible	Gas tank/Réservoir à essence/ Tanque de gasolina	Safety valve/Soupape de sûreté/Válvula de seguridad
High voltage battery pack/ Bloc-batterie haute tension/ Paquete de batería de alto voltaje	High voltage power cable, component/Câble d'alimentation haute tension, composant/Cable de alimentación de alta tensión, componente	High voltage disconnect/ Sectionneur haute tension/ Desconexión de alta tensión	Fuse box disabling high voltage system/Boîte à fusibles désactivant le système haute tension/Caja de fusibles que desactiva el sistema de alta tensión	Ultra capacitor, high voltage/ Supercondensateur, haute tension/Ultracapacitor, alto voltaje

This summary shows the maximum configuration / equipment possible for the vehicle.	Document Nº 1N4-RS23EA0ZE1U0	Page Nº 01
Ce sommaire indique la configuration/l'équipement maximal possible pour le véhicule.	Nº de document 1N4-RS23EA0ZE1U0	Nº de page 01
Este resumen muestra la configuración / equipamiento máximo posible para el vehículo.	Document Nº 1N4-RS23EA0ZE1U0	Página Nº 01

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1. Identification / Recognition

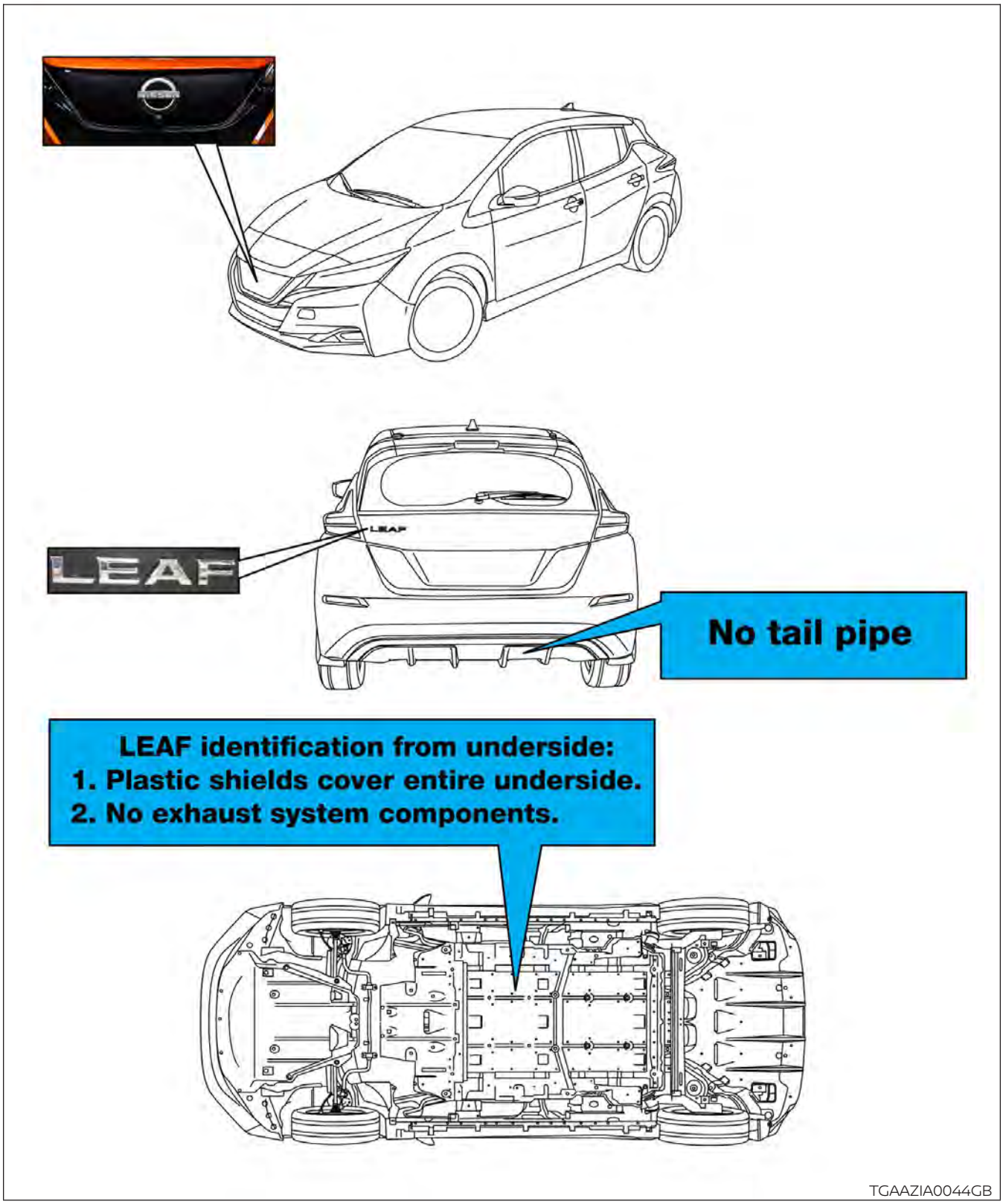
1-1 About The Nissan LEAF®

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.

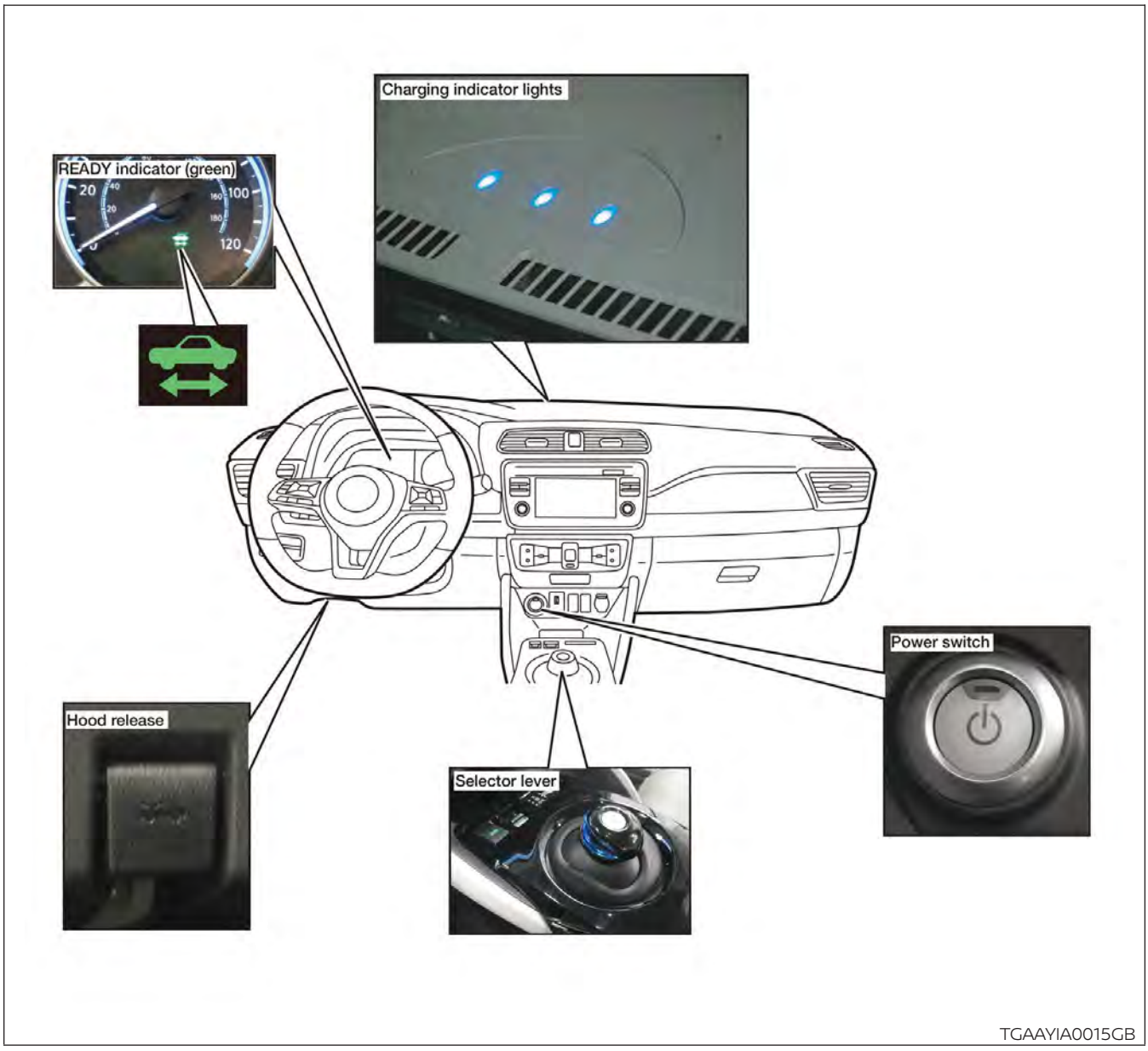
1-1.1 Exterior

The specific exterior identification features are indicated as follows:



1-1.2 Interior Component Location

Interior components referenced in this manual are as follows:



1-1.3 Vehicle Identification Number (VIN) Layout

The vehicle identification number can be located as follows: Example VIN :
1N4 **A**/ **CZ**1BV9PC123456

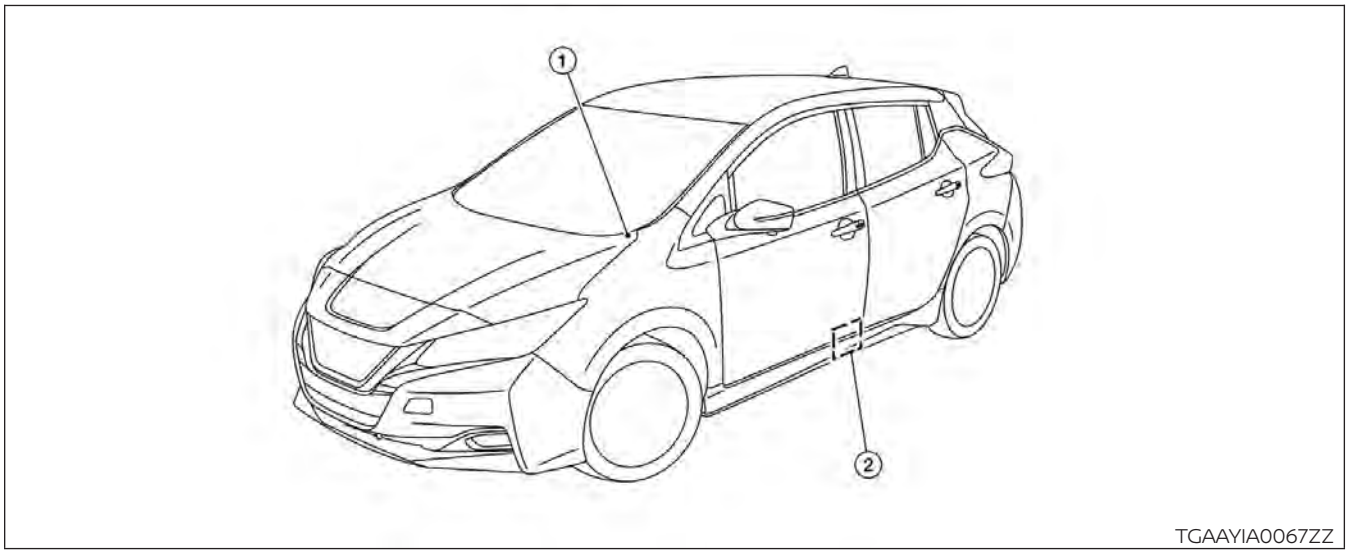
The High-voltage battery type is identified by the 4th alphanumeric character: **A** or **C**

A = 40 kWh Battery

C = 60 kWh Battery

The LEAF is identified by the 5th alphanumeric character: **Z**

Z = Electric vehicle



1. VIN plate (visible through windshield)
2. Vehicle certification label (lower center pillar)

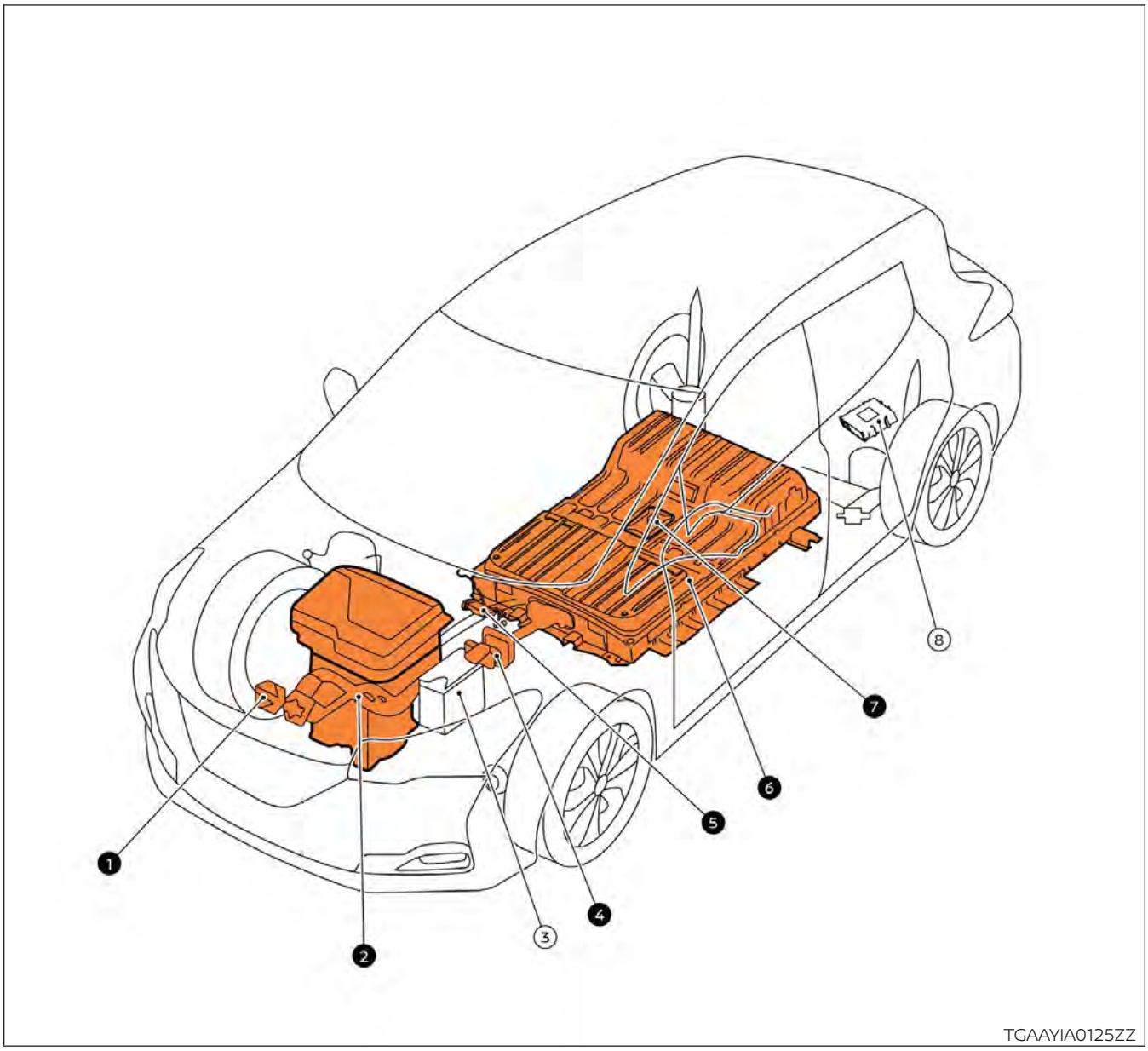
1-1.4 Warning and Indicator Lamp Information

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



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NOTE:

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

⇦ : Vehicle front.

No.	Component	Location	Description
❶	Charge port	Under hood	Connecting port for EVSE (Electric Vehicle Supply Equipment). Two ports are available: Normal charge and quick charge (if so equipped).

No.	Component	Location	Description
❷	Traction Motor	Under hood	Converts three-phase AC power to drive power (torque) which propels the vehicle.
	Inverter	Under hood	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.
	Electric air conditioner compressor	Under hood	Air conditioner compressor
	Power Delivery Module (PDM) • On Board Charger • DC/DC Converter • High-voltage junction box (J/B)	Under hood	The PDM includes an On Board Charger, DC/DC converter and high-voltage junction box (J/B). The On Board Charger converts single-phase AC power from a home power outlet to DC power and increases the voltage in order to charge the high-voltage battery. The DC/DC converter reduces the voltage of the high-voltage battery to provide power to the 12-volt battery in order to operate the vehicle's electric components (headlights, audio system, etc.). The J/B provides electric power from the high-voltage battery to all high-voltage parts of the vehicle.
③	12-volt Battery	Under hood	A lead-acid battery that supplies power to the low voltage devices.
❹	High-voltage cables	Under hood and undercarriage	Orange-colored power cables carry high-voltage current between each of the high-voltage components.
❺	Cabin heater	Interior (This unit is installed behind the instrument panel)	This is the electric heat source for the cabin heater. It heats the interior of the vehicle.
❻	High-voltage battery	Undercarriage	Stores and outputs DC power (Maximum voltage 420V) needed to propel the vehicle.
❼	High-voltage battery service disconnect	Rear seat floor	Isolates the battery from the rest of the high-voltage electrical system.
⑧	Brake power supply backup unit	Cargo area (This unit is installed behind a trim panel to prevent access)	Power supply backup unit for the brake system. It supplies power to the brake system if a malfunction occurs in the 12-volt battery.

High-Voltage Battery Pack Specifications

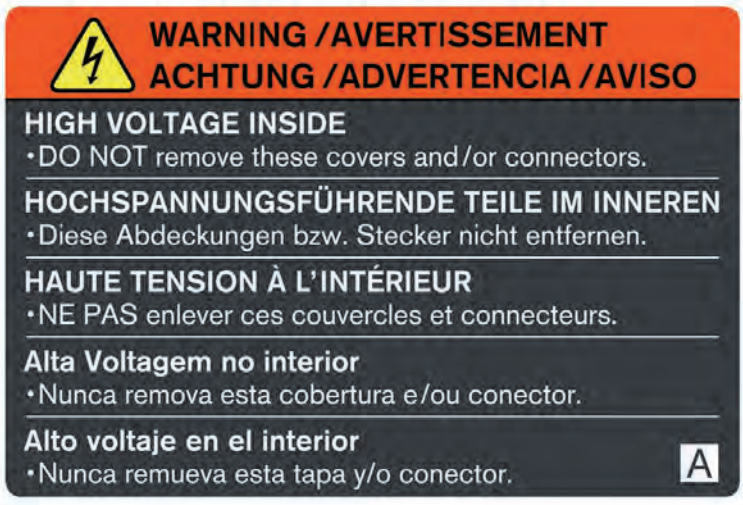
High-voltage battery voltage	(240V - 405.5V usable range)
Number of high-voltage battery modules in the pack	24
High-voltage battery dimensions	**40 kWh:** 60.90 x 46.77 x 10.39 in. (1547 x 1188 x 264 mm)
	60 kWh: 60.76 x 49.13 x 12.22 in. (1543.2 x 1248 x 310.5 mm)
High-voltage battery weight	**40 kWh:** 668.1 lbs (303 kg)
	60 kWh: 961.4 lbs (436 kg)

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 power delivery module (PDM) located under hood.



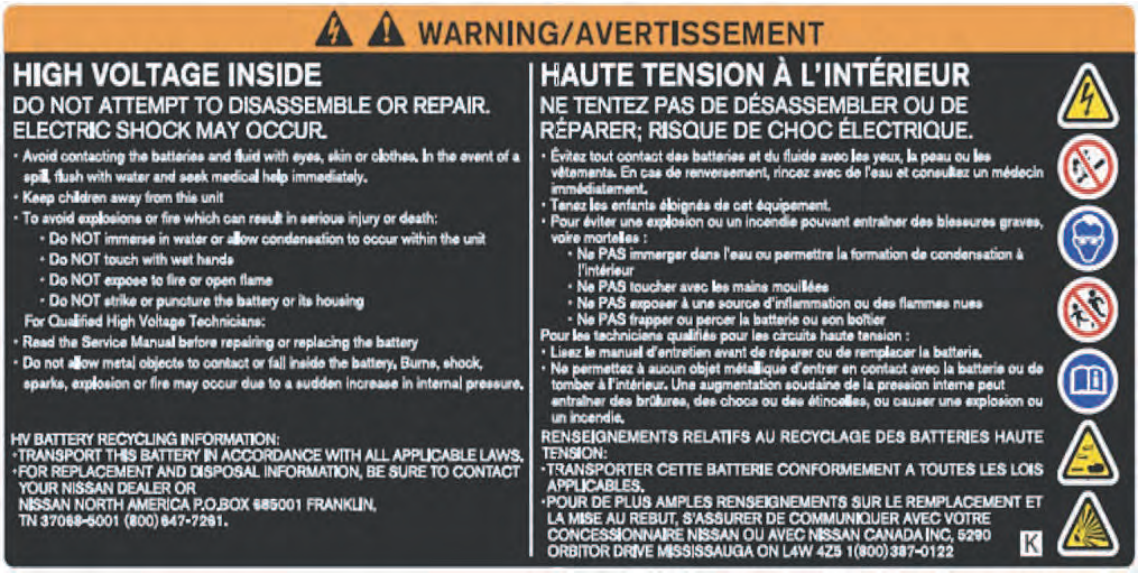
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The following warning label is applied to the service plug access cover located in the rear seat floor.



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



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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.

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 2-2 Preparation Items (ERG-15)) and shut off the high-voltage system by referring to 3-1.4 Powering Down the High-voltage System (ERG-23).
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 / Fitting

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).**
- **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 3-1.4 Powering Down the High-voltage System (ERG–23). 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 grille emblem illumination, 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: 10mm	To remove the service plug access cover bolts. To remove the 12-volt battery terminal bolt.
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).

First Responders:

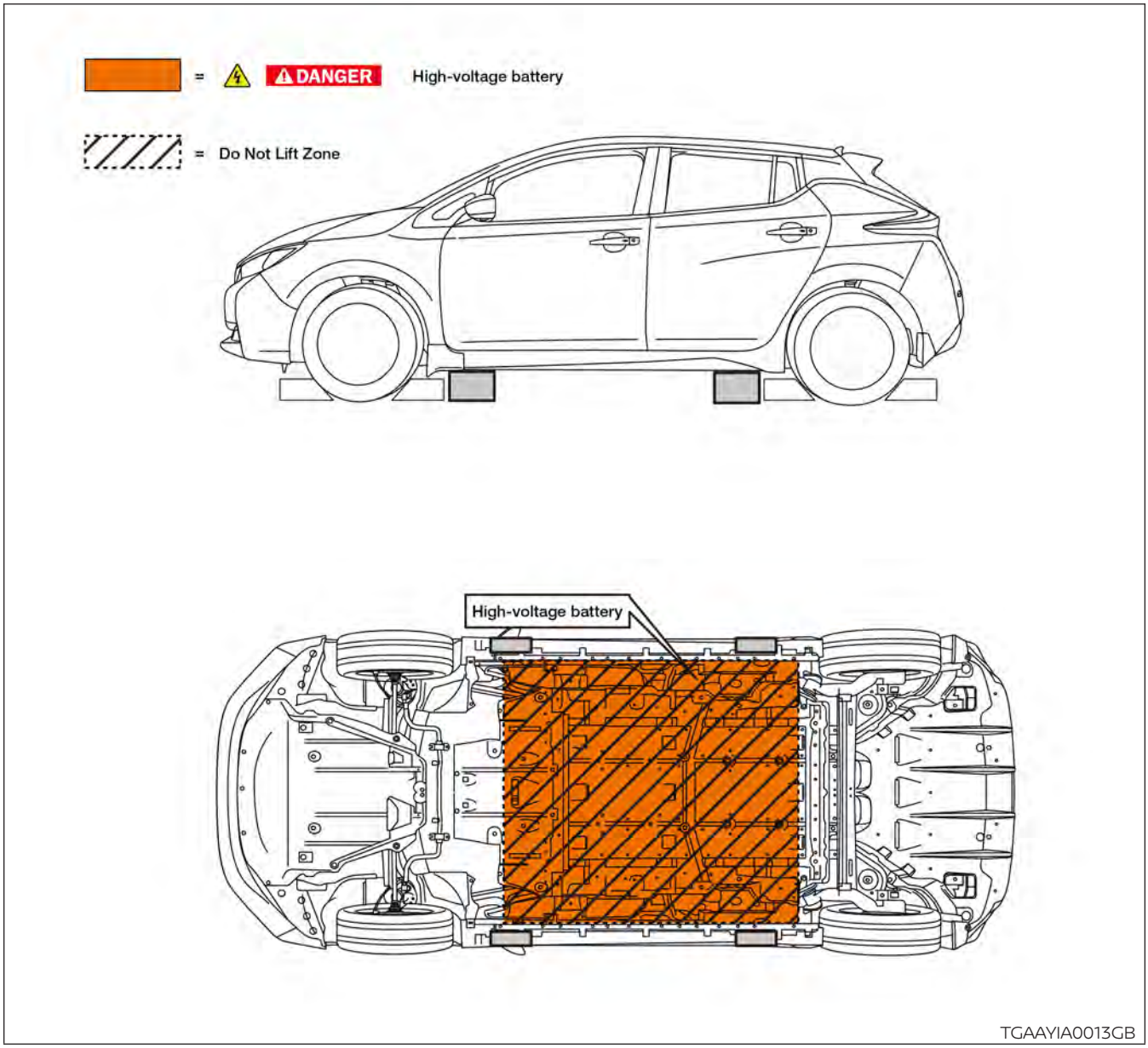
- Stabilize the vehicle with cribbing, by removing air from the tires, or utilize the Lift Airbag Equipment for rescue.

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.**



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3. Disable Direct Hazards / Safety Regulations

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

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 Nissan 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 a Nissan 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-9). 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.

3-1.1 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 3-1.2 Removing the Charge Connector (ERG-21).
- 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:

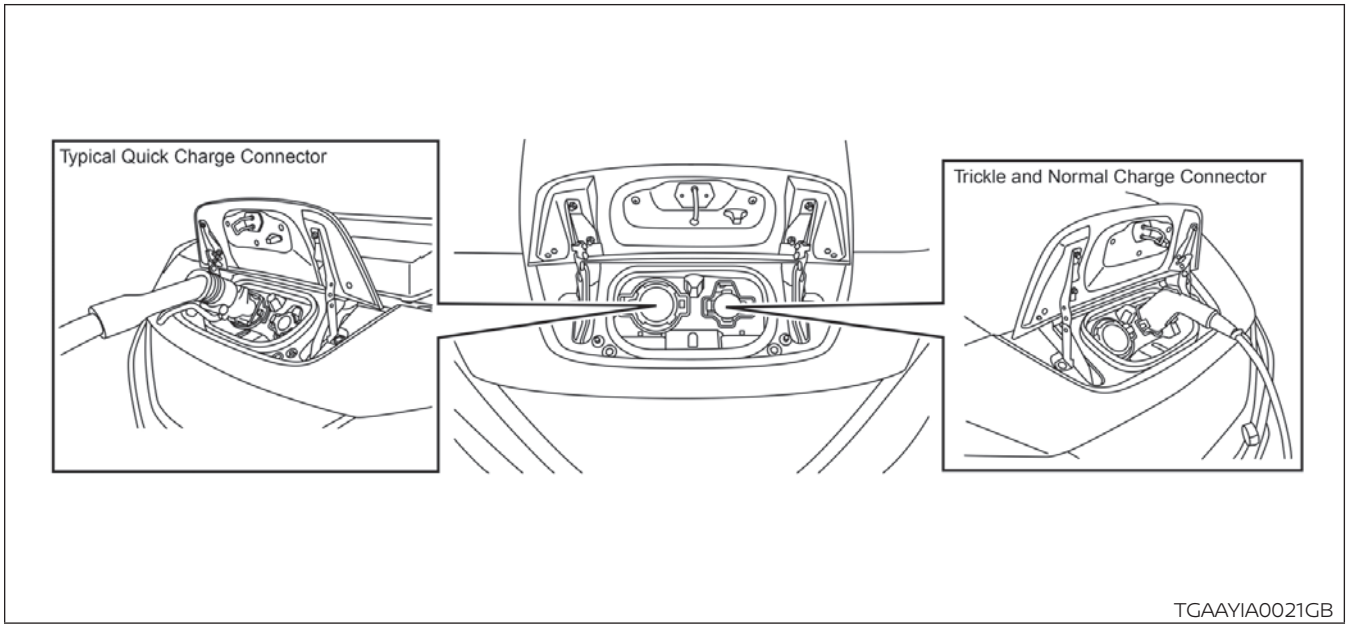
  – charging indicator is turned ON

  – READY indicator is turned ON

  Refer to 1-1.2 Interior Component Location (ERG-6) 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.

3-1.2 Removing the Charge Connector

NOTE:
Use the illustration to identify the type of charge connector and follow the appropriate procedure.



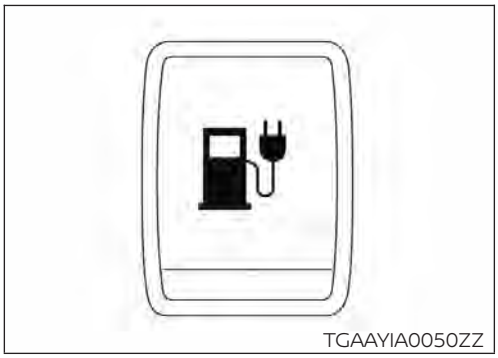
1. **Quick Charge Connector (If So Equipped)**

   NOTE:
   The quick charger must be OFF to release the charge connector lock.
   Release the quick connector lock and pull to remove. Refer to the quick charger label or instructions.

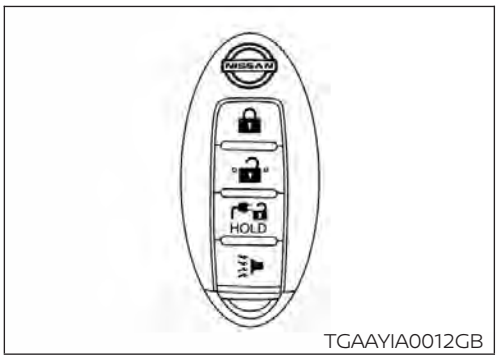
2. **Trickle and Normal Charge Connectors**
   a. Press the charge connector release button on the charge connector and pull to remove.

      NOTE:
      If the charge connector cannot be removed, the electric lock is engaged. Follow the next steps to disengage.

   b. To disengage the electric charge connector lock, push the charge port lid opener switch. The charge connector will temporarily unlock for 30 seconds.

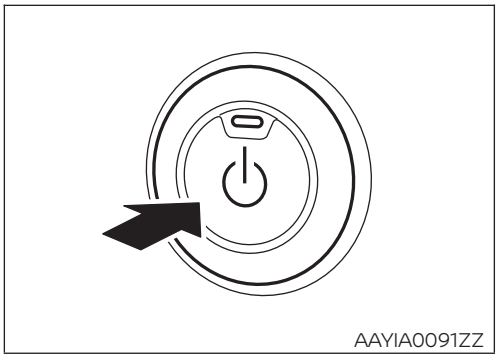


c. The charge connector can be unlocked by pushing the charge connector unlock button on the Nissan Intelligent Key® for more than 1 second. The charge connector will temporarily unlock for 30 seconds.
d. Press the charge connector release button and pull the charge connector to remove it.

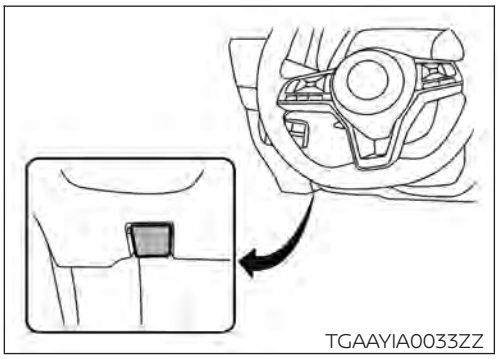


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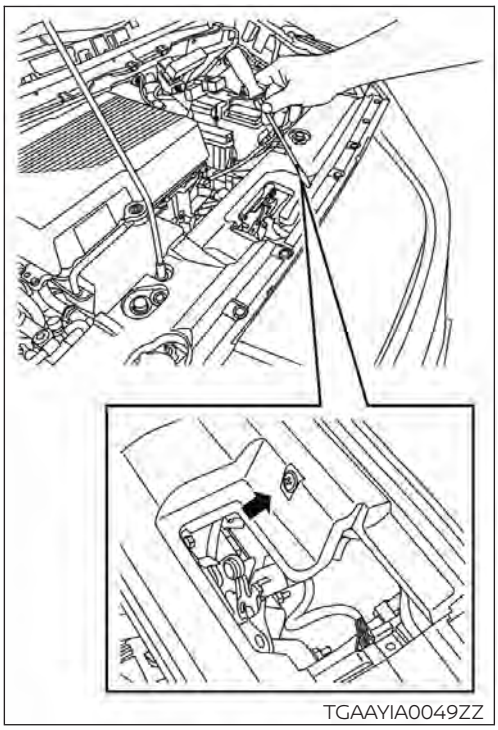
3. **If the Trickle or Normal Charge Connector Cannot Unlock**
   a. Place power switch in OFF position.


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   b. Open the hood.

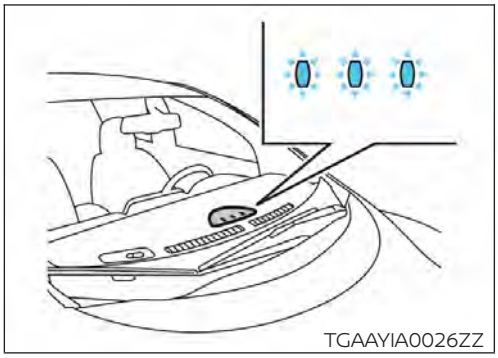

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c. Using a flat head screwdriver (or suitable tool), insert into the screw located through the access hole near the front of the hood lock.
d. Rotate screw clockwise to release the charge connector lock.
e. Press the charge connector release button and pull the charge connector to remove it.


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3-1.3 Indications the High-voltage System is ON

1. If the READY indicator is ON, the high-voltage system is active.
2. If the grille emblem illumination is ON, the high-voltage system is active.
3. The high-voltage system is active if any charge indicator is ON (blue LEDs on top of the instrument panel).


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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.

3-1.4 Powering Down the High-voltage System

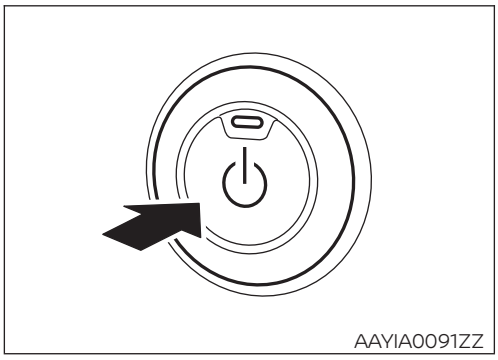
The high-voltage system can be shut down with any 1 of the following procedures:

- Turn OFF the power switch **and** disconnect the 12-volt battery. Refer to 3-1.5 Primary Procedure (ERG–24).
- Remove the fuses for the high-voltage control system and disconnect the 12-volt battery. Refer to 3-1.6 Alternate Procedure 1 (Remove Fuses) (ERG–25).
- Remove the service plug and disconnect the 12-volt battery. Refer to 3-1.7 Alternate Procedure 2 (Remove Service Plug) (ERG–27).

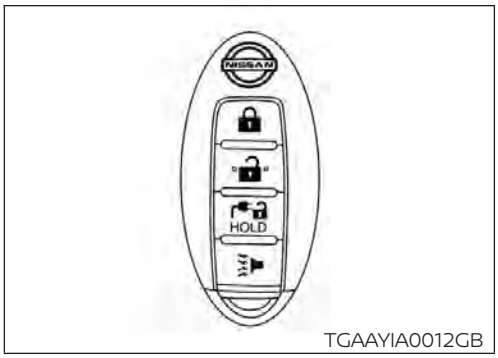
3-1.5 Primary Procedure

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 and continue to the next steps to open the hood for 12-volt battery negative cable access.

   If the READY indicator does not turn off, refer to 3-1.6 Alternate Procedure 1 (Remove Fuses) (ERG-25) .

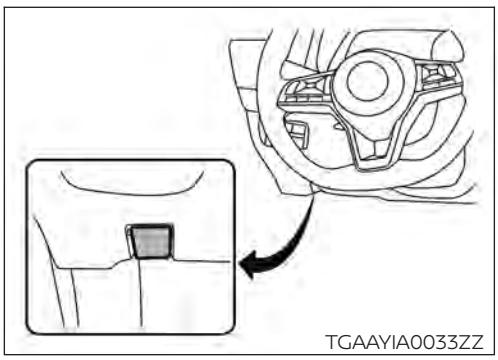

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4. If possible, keep the Nissan Intelligent Key® at least 5 meters (16 feet) away from the vehicle.



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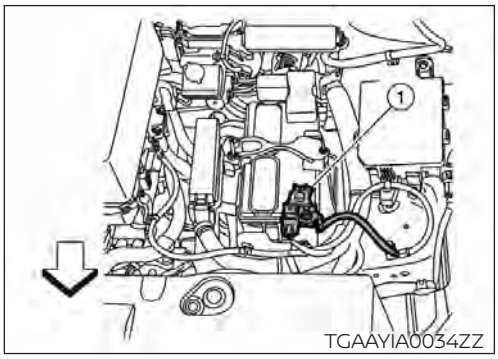
5. Open the hood.


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

   NOTE:

   ⇦ **: Vehicle front.**

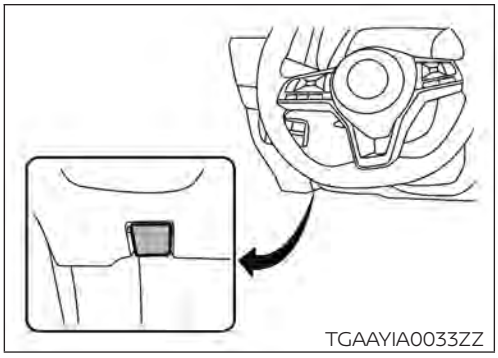


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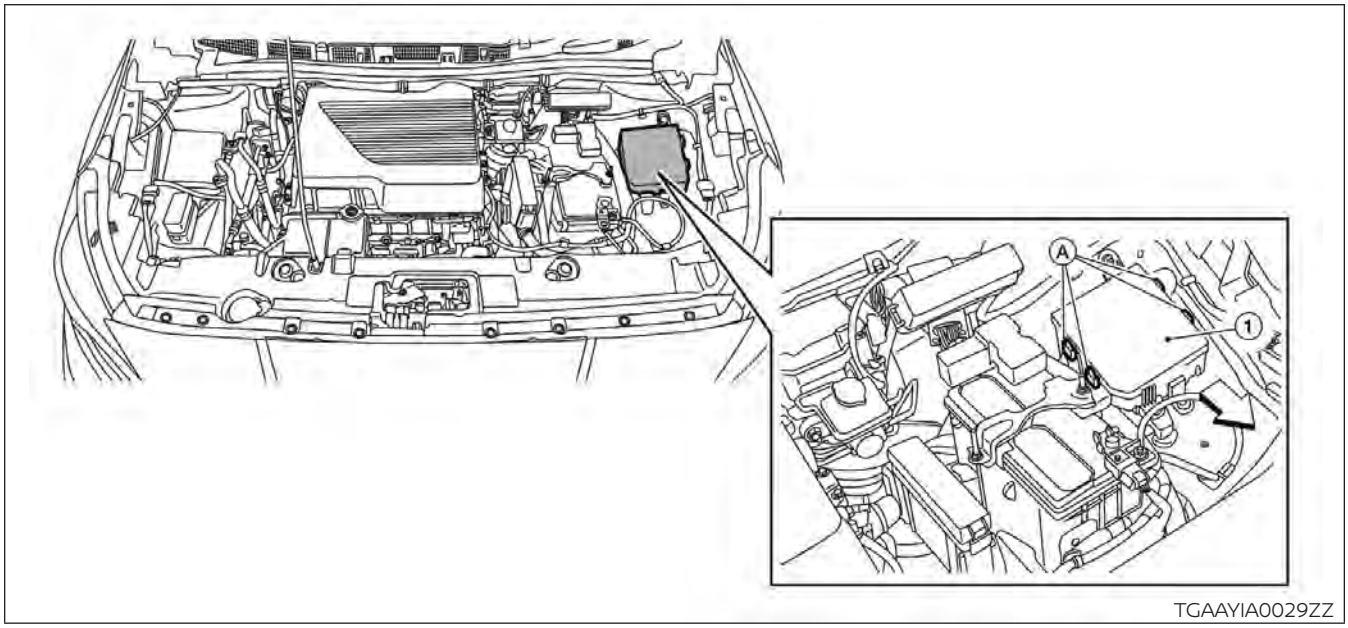
7. **Wait at least ten (10) minutes for complete discharge** of the high-voltage capacitor after the power switch has been turned OFF.
8. Perform the emergency response, roadside assistance action or dismantling operation.

3-1.6 Alternate Procedure 1 (Remove Fuses)

1. Open the hood.


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2. Press and expand the pawls (**A**) on the sides of the fuse box and remove the fuse box (**1**) from its housing.



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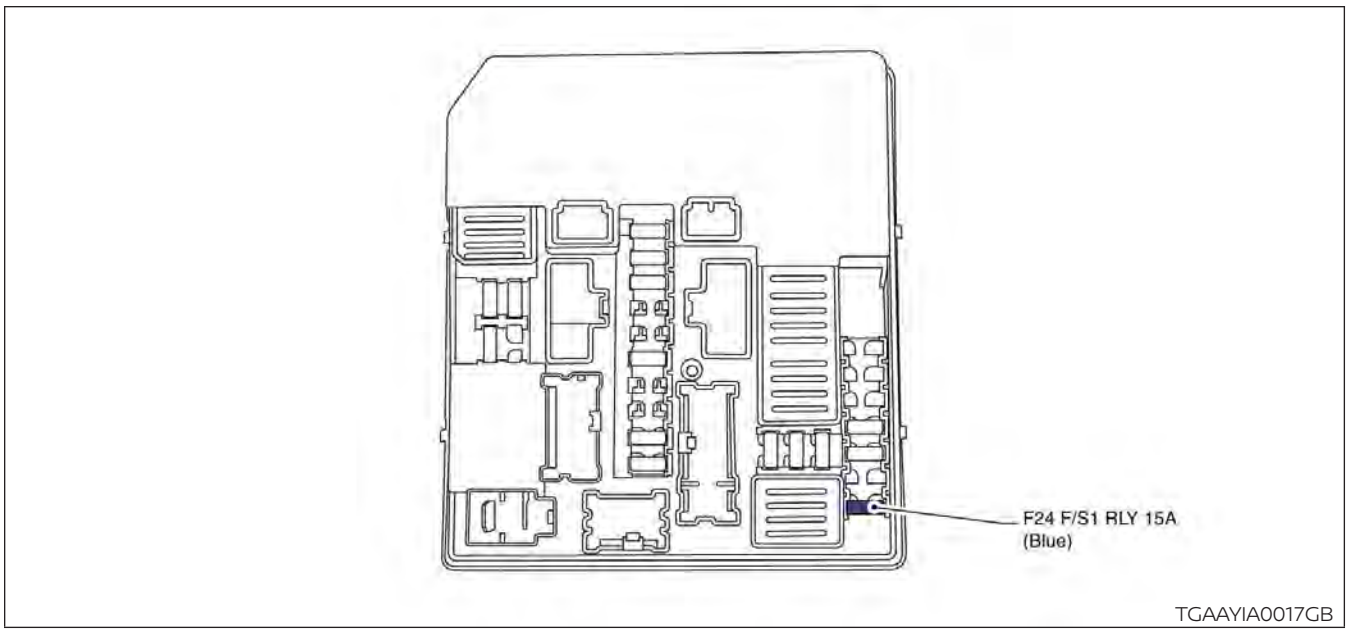
NOTE:

⇦ : Vehicle front.

NOTE:

There is no separate fuse box cover. The bottom of the fuse box is also its cover.

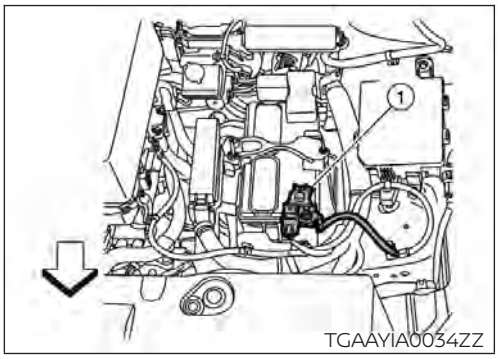
3. Remove F/S1 RLY Fuse (F24 F/S1 RLY 15A).



4. If you cannot identify the above fuse, remove all fuses in the fuse boxes.
5. Disconnect the negative (-) 12-volt battery cable (**1**). Insulate the negative (-) battery cable terminal with insulated tape.

NOTE:

⇦ : Vehicle front.



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

⚠WARNING

⚠ To avoid unintended reinstallation and risk of electrical shock and severe personal injury or death, the rescuer should carry the fuses on his/her person and cover the fuse box with insulated tape.

3-1.7 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.**

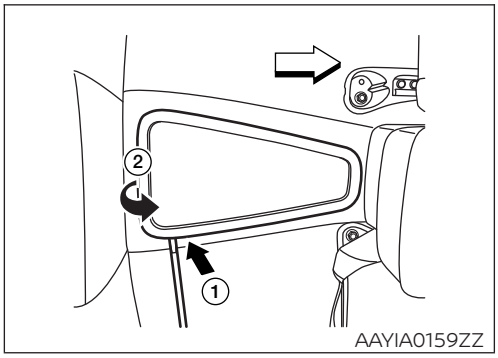
⚠WARNING

To avoid 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. Insert a suitable tool (**1**) under the RH rear corner of the access trim cover located on the floor behind the center console. Pry up (**2**) and remove.

   NOTE:

   ⇦ : Vehicle front.

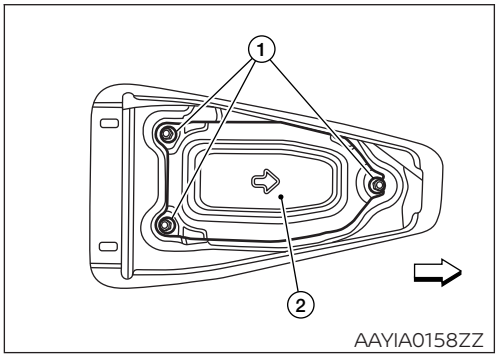


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2. Remove the 10 mm access cover bolts (**1**) and remove the cover (**2**).

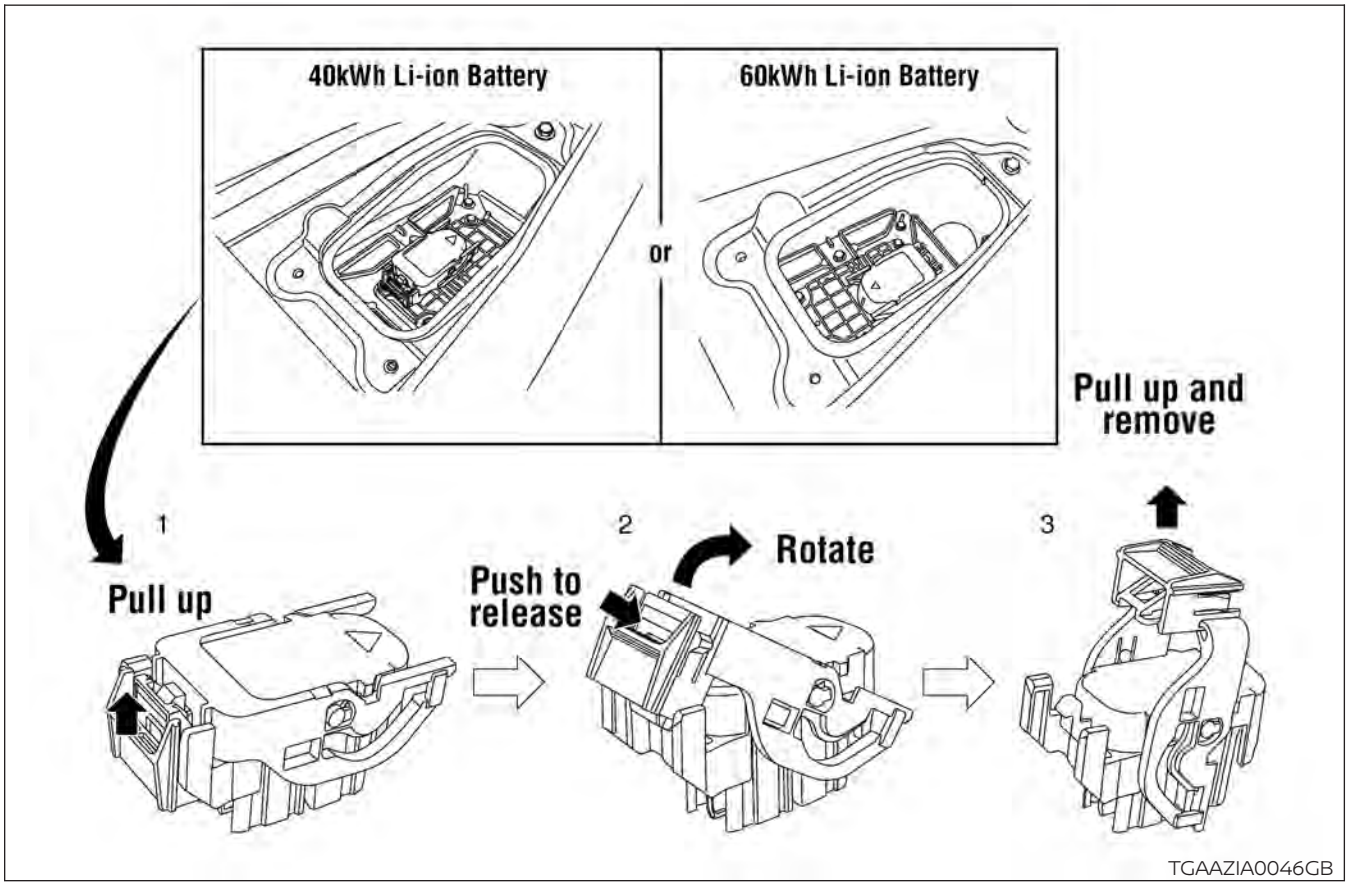
   NOTE:

   ⇦ : Vehicle front.

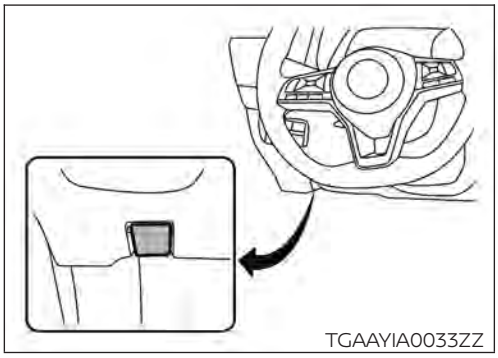


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3. Remove the service plug using the following steps: (**1**) pull up and release the green lever, (**2**) press the locking tab to release and rotate fully upward, (**3**) pull the service plug completely out of its socket.



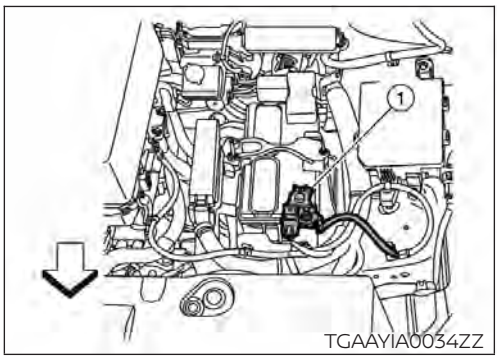
4. **Wait at least (10) minutes for complete discharge** of the high-voltage capacitor after the service plug has been removed.
5. Open the hood.



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

   NOTE:

   ⇦ : Vehicle front.

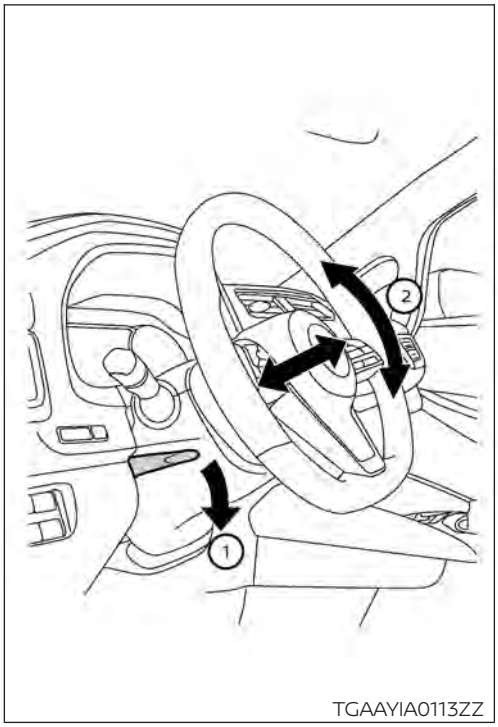


7. Perform the emergency response, roadside assistance action or dismantling operation.

4. Access to the Occupants

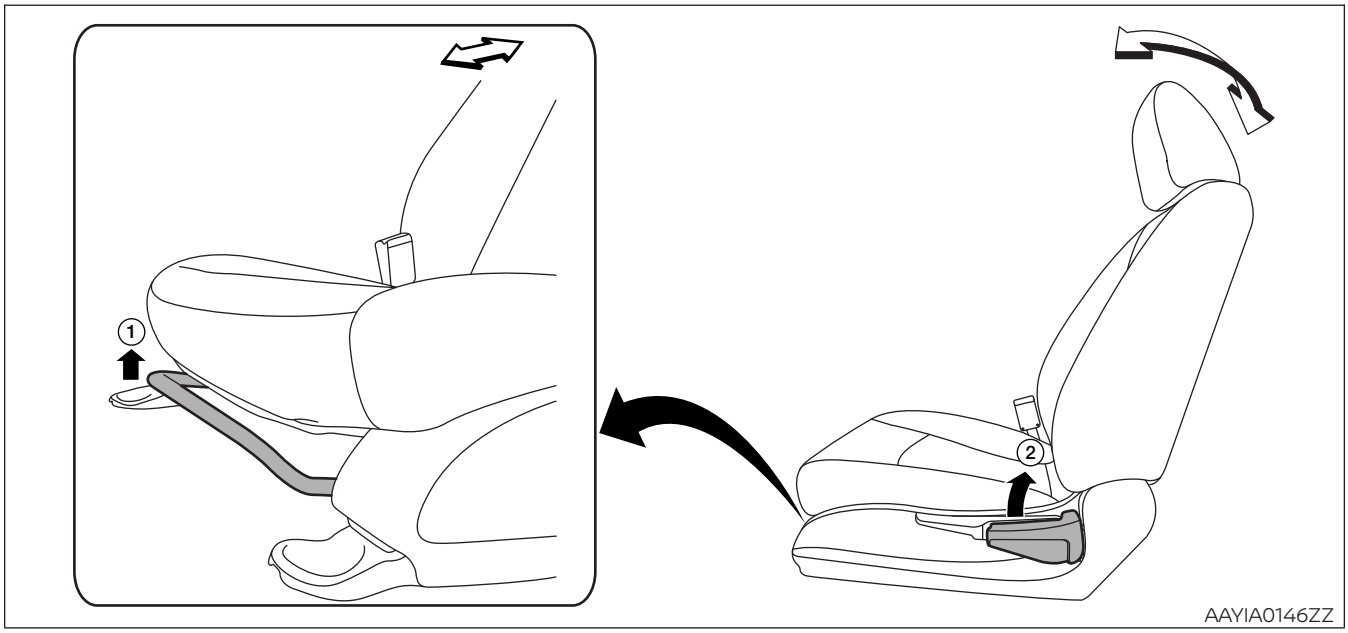
4-1 Accessing the Occupants

1. Remove windows.
    a. Perform window removal the same as a normal vehicle.
2. Remove doors.
    a. 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.
3. Adjust steering wheel and front seat position (if necessary).
    a. To adjust steering wheel, push the lock lever down (**1**) and adjust the steering wheel up or down, forward or rearward (**2**).



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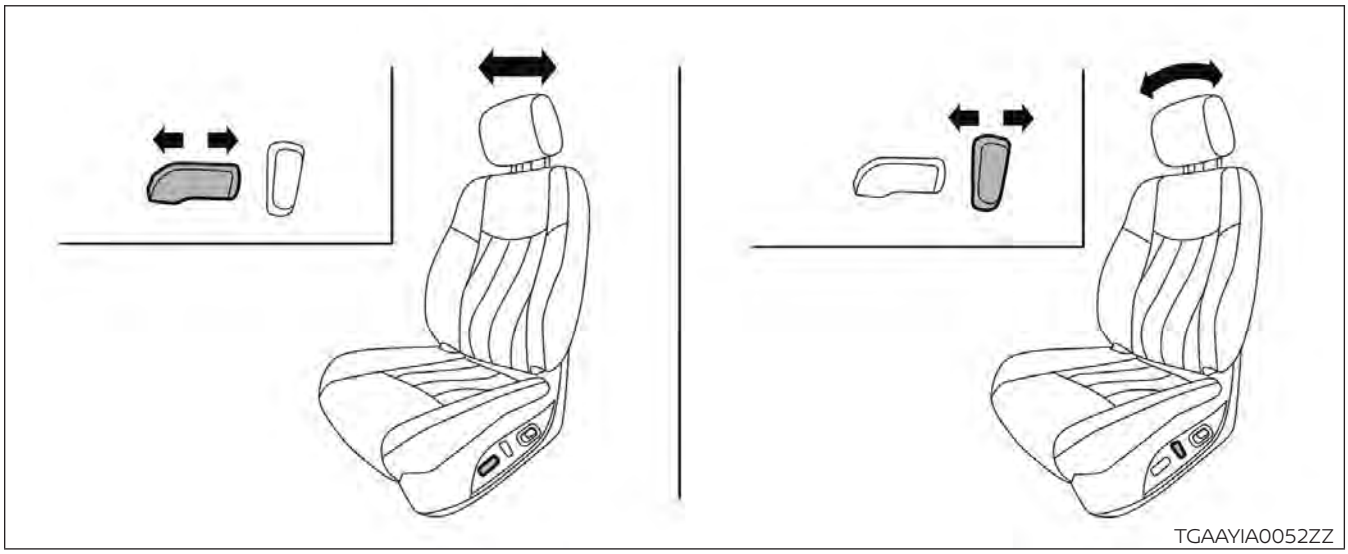
b. Manual front seat can be adjusted forward/backward by pulling up and holding lever (**1**) and tilted forward/backward by pulling up and holding lever (**2**).



c. Power front seat can be adjusted as shown.

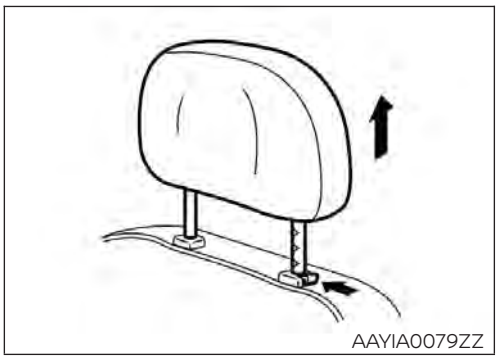
NOTE:

Before disconnecting the 12-volt battery terminal, if necessary, lower the windows, adjust the driver power seat, unlock the doors, etc. Once 12-volt battery is disconnected, power controls will not operate.



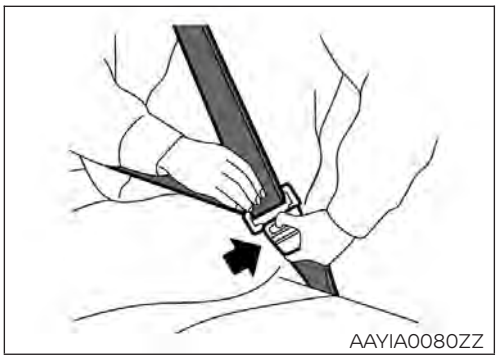
4. Remove front seat head restraint (if necessary).

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


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5. 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.


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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.**

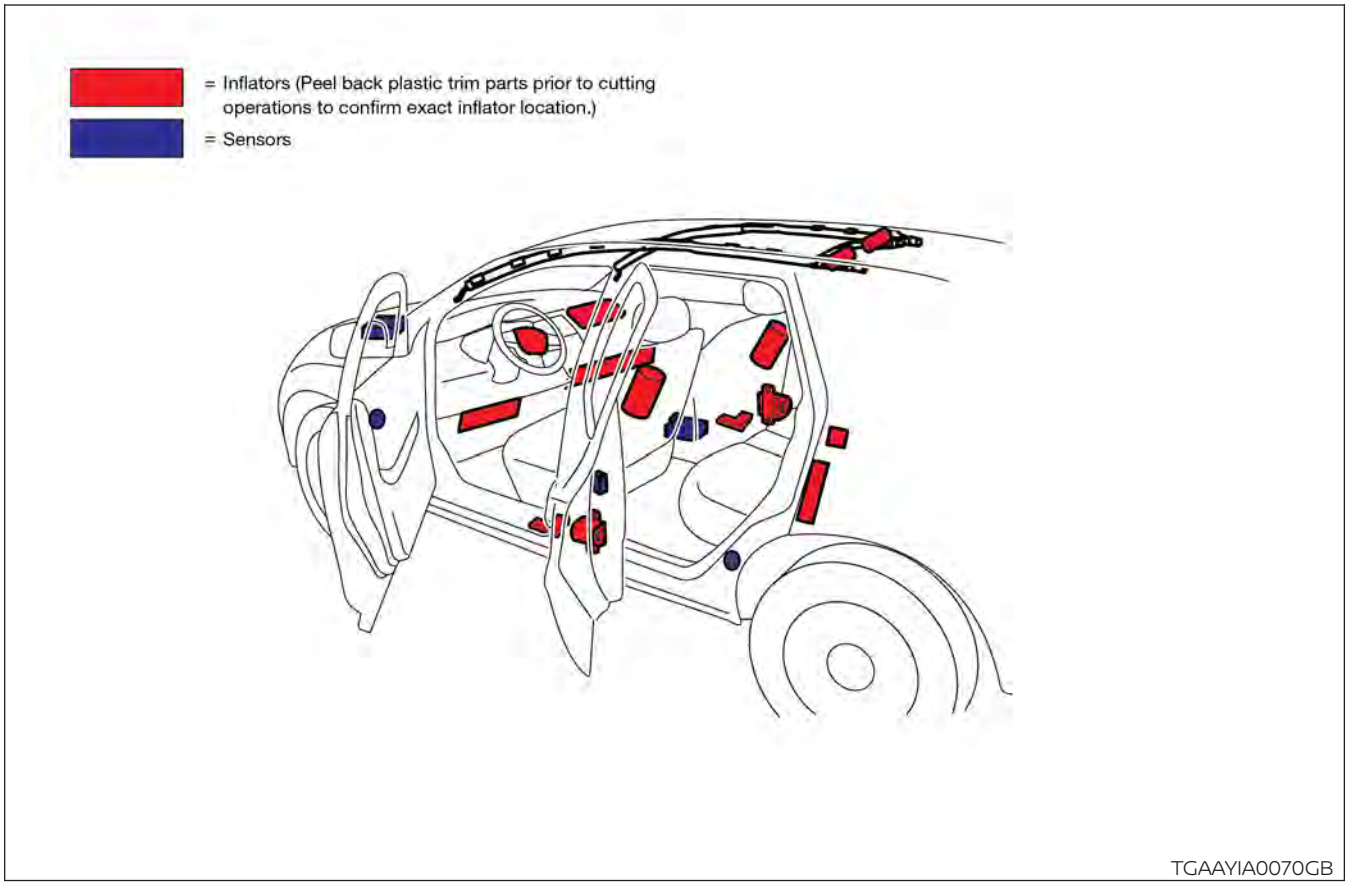
If at least **ten (10) minutes** have passed since the rescuer shut down the high-voltage system (refer to 3-1.4 Powering Down the High-voltage System (ERG–23)), then the rescuer can cut the vehicle except for the high-voltage battery.

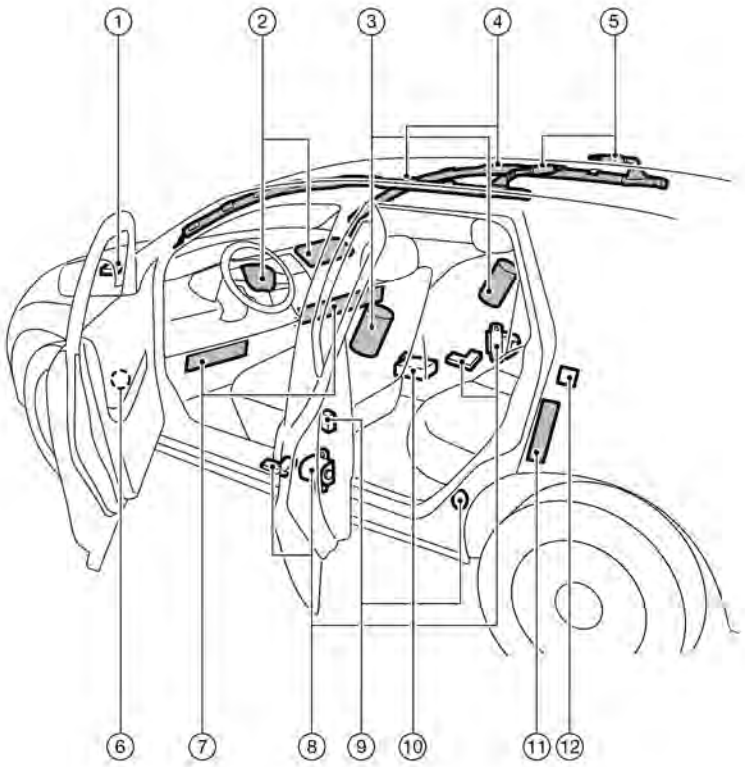
If the rescuer cannot wait the full ten (10) minutes or shut down the high-voltage system, absolute care must be taken to avoid cutting HV parts and appropriate Personal Protective Equipment (PPE) must always be worn. DO NOT cut the high-voltage battery due to possible electrocution risk and electrolyte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

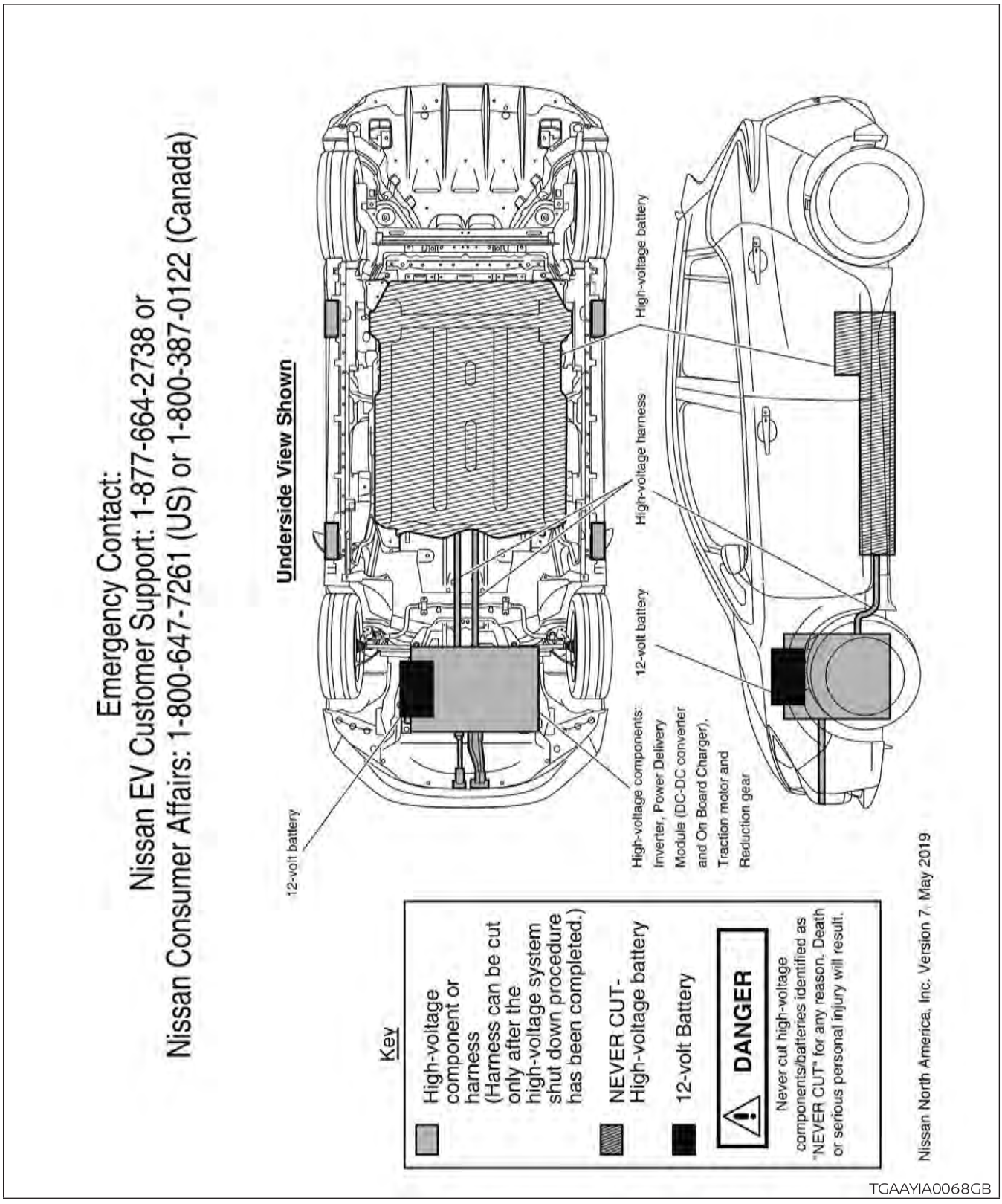
- The front, side and curtain air bags have deployed.
- At least three (3) minutes have passed after the 12-volt battery negative (-) cable has been disconnected and the high-voltage system has been shut down.



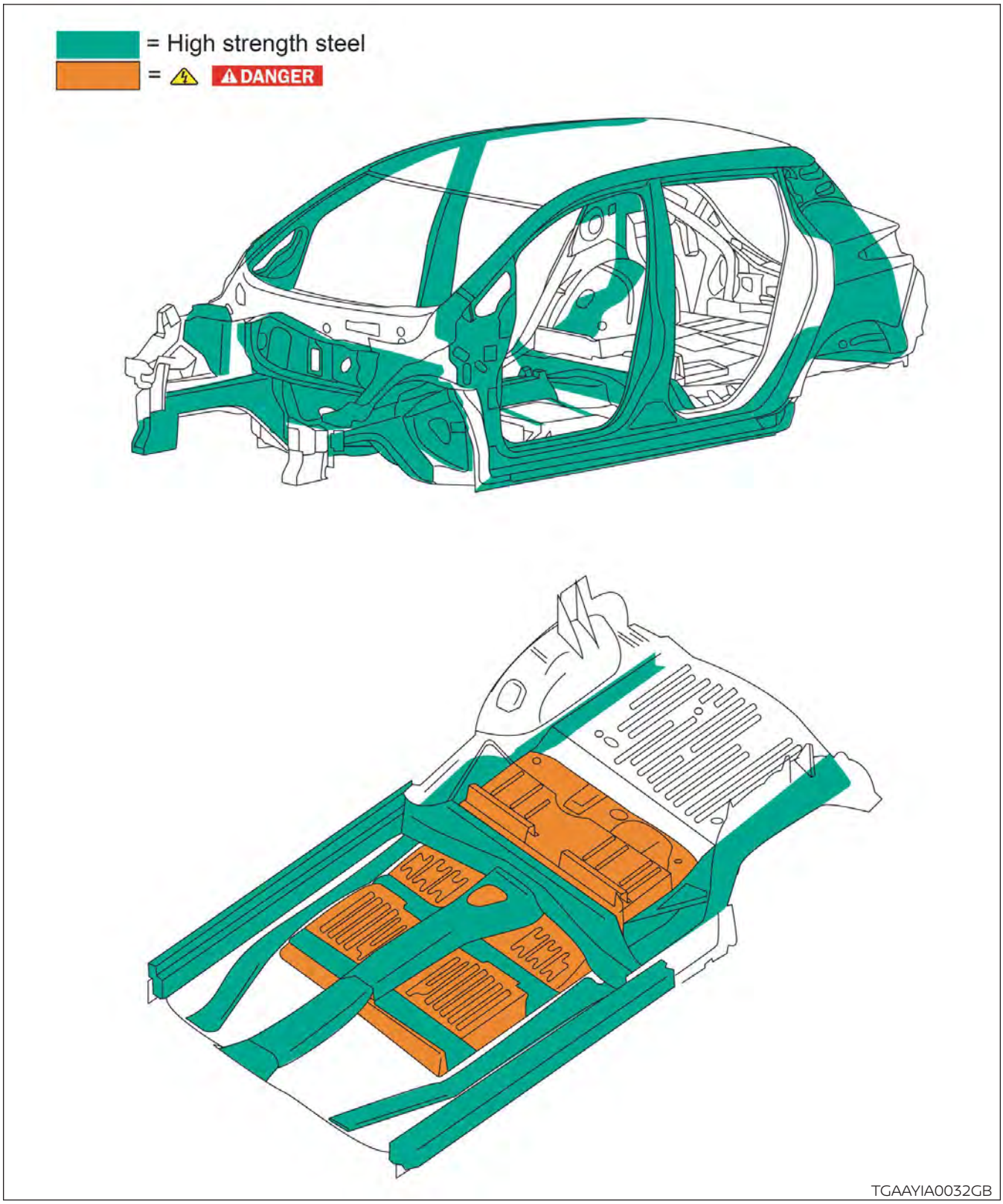


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1. Crash zone sensor
2. Supplemental front-impact air bag modules
3. Front seat-mounted side-impact supplemental air bag modules
4. Roof-mounted curtain side-impact and rollover supplemental air bag modules
5. Roof-mounted curtain side-impact and rollover supplemental air bag inflators
6. Front door satellite sensors
7. Driver and passenger supplemental knee air bag modules
8. Seat belts with pretensioners (front seats)
9. Rear satellite sensors (located in lower B-pillars and C-pillars) (driver's side shown; passenger's side similar)
10. Air bag control unit (ACU)
11. Rear outboard seat-mounted side impact supplemental air bag modules (driver's side shown; passenger's side similar)
12. Seat belt with pretensioner (rear outboard seats) (driver's side shown; passenger's side similar)


Emergency Contact:
Nissan EV Customer Support: 1-877-664-2738 or
Nissan Consumer Affairs: 1-800-647-7261 (US) or 1-800-387-0122 (Canada)
Underside View Shown
12-volt battery
High-voltage components: Inverter, Power Delivery Module (DC-DC converter and On Board Charger), Traction motor and Reduction gear
12-volt battery
High-voltage harness
High-voltage battery
Key
High-voltage component or harness (Harness can be cut only after the high-voltage system shut down procedure has been completed.)
NEVER CUT- High-voltage battery
12-volt Battery
DANGER
Never cut high-voltage components/batteries identified as "NEVER CUT" for any reason. Death or serious personal injury will result.
Nissan North America, Inc. Version 7, May 2019
TGAAYIA0068GB

4-2.3 High Strength Steel Locations



5. Stored Energy / Liquids / Gases / Solids

5-1 High-voltage Battery Damage and Fluid Leaks

⚠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 irritant – If contact with skin, rinse with plenty of water and see a doctor immediately.**
- **Electrolyte solution is an eye irritant – If contact with eyes, rinse with plenty of water and see a doctor immediately.**
- **If electrolyte leak occurs, wear appropriate solvent resistant PPE and use a dry cloth to clean up the spilled electrolyte. Be sure to adequately ventilate the area.**
- **Electrolyte solution is highly flammable.**
- **Electrolyte liquid or fumes that have come into contact with water vapors 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.**

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 is an electric car and 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.

NOTE:

Other fluids in the vehicle are the same as those in a conventional internal combustion vehicle.

6. In Case of Fire

6-1 Vehicle Fire

⚠WARNING

- **Always utilize full Personal Protective Equipment (PPE) and self-contained breathing apparatus during fire fighting operations. Smoke from a LEAF 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.**

⚠CAUTION

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 fire fighting practices.

If you must walk away from the vehicle, notify an appropriate responder or a rescue person of the fact that the vehicle is an electric 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.

7. In Case of Submersion

7-1 Water Submersion

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.

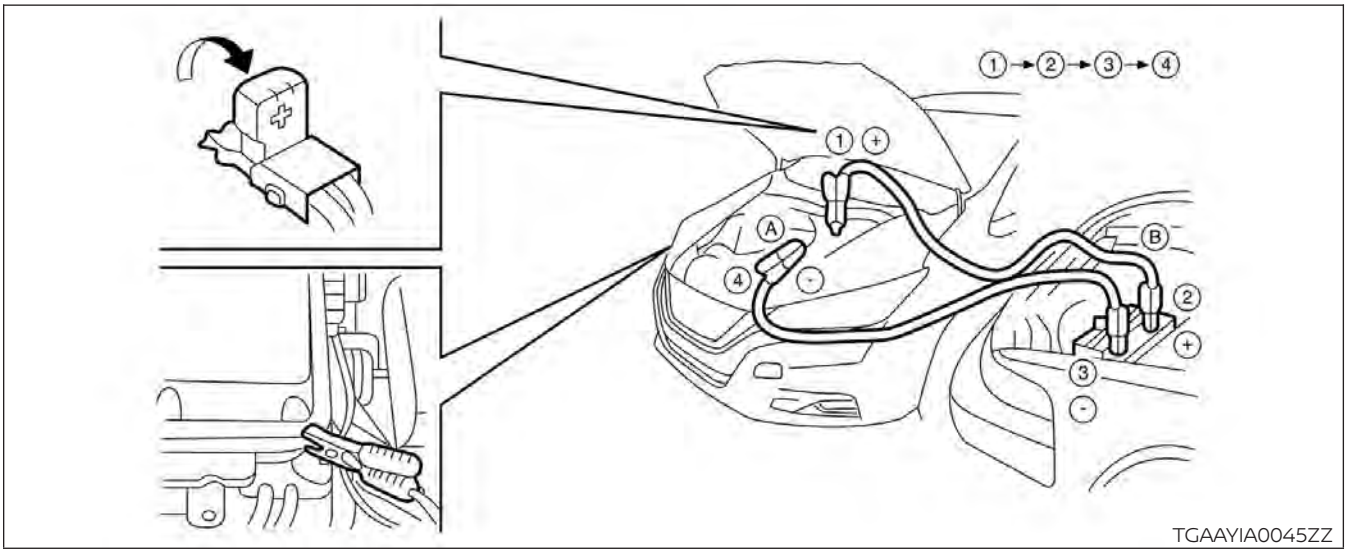
⚠WARNING

- **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. Make sure the vent tube is correctly installed.**
- **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 at the same time that the high-voltage battery is being charged. Doing so may damage the vehicle or charging equipment and could cause an injury.**

Jump Starting Procedures



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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 (if possible).
6. Ensure vent caps are level and tight.
7. Connect jumper cables in the sequence as illustrated **(**① ® ② ® ③ ® ④**)**.

⚠CAUTION

- **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. 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:

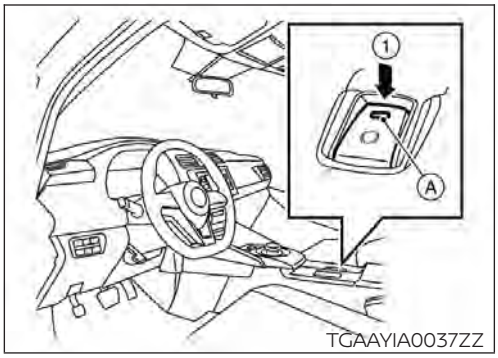
If it is not possible to turn the LEAF system ON by following this procedure, it is recommended you contact a NISSAN certified LEAF dealer immediately.

8-1.2 Electric Parking Brake Release Procedures

Releasing Electric Parking Brake Using Parking Brake Switch

If 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 (**1**). 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-43), 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.

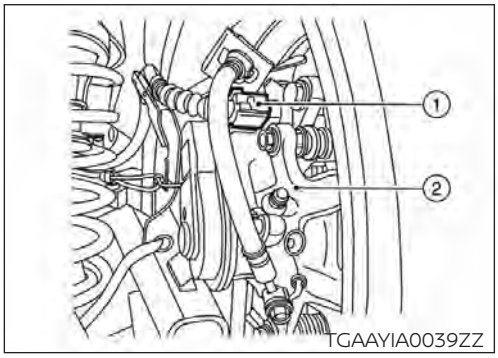
⚠WARNING

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

⚠WARNING

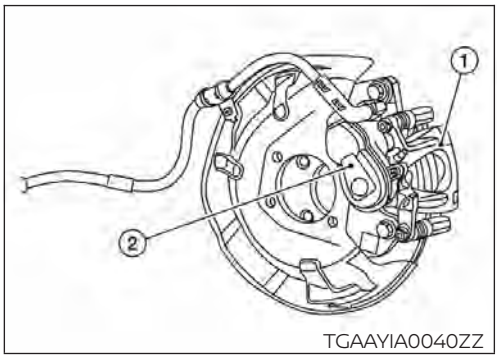
Never reuse the parking brake actuator. Doing so may cause brake system failure and possibly result in serious personal injury.

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



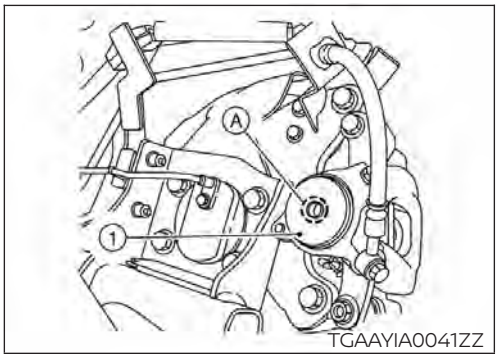
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2. Remove the parking brake actuator (**2**) from the rear brake caliper assembly (**1**).



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



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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.

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

1. To start the EV system with a booster battery, refer to 8-1.1 Jump Starting (ERG-40).
2. Turn power switch ON by pushing the power switch 2 times without pressing brake pedal.
3. Press and hold the brake pedal.
4. Place the selector lever in the N (Neutral) position.
5. If applied, release the parking brake.

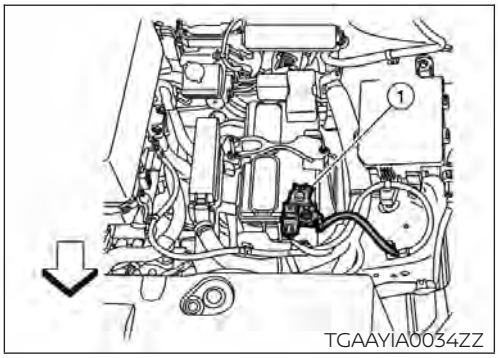
   NOTE:

   If the vehicle is equipped, the electric parking brake switch will not operate after the 12-volt battery is disconnected in the next step. Be sure to release the electric parking brake before the 12-volt battery is disconnected.

6. Leave the power switch ON and disconnect the negative (-) 12-volt battery cable (**1**).

   NOTE:

   ⇦ **: Vehicle front.**



7. Be sure the vehicle is properly secured with wheel chocks and release brake pedal.

Reset Procedure

1. To start the EV system with a booster battery, refer to 8-1.1 Jump Starting (ERG-40).
2. Turn the power switch ON. Ensure selector lever is in the N (neutral) position.
3. Push the P (Park) position switch to place the vehicle in the P (Park) position.
4. Turn the power switch OFF.

8-1.4 Towing

Vehicle Specifications

Length (with license plate)	176.8 in. (4,490 mm)
Width (with outside mirrors)	79.9 in. (2,029 mm)
Overall Height (with antenna)	16 in. wheels: 61.4-61.6 in. (1,561–1,565 mm) 17 in wheels: 61.6-62.0 in. (1,565-1,575 mm) (Height varies by equipment and trim level.)
Wheelbase	106.3 in. (2,700 mm)
Minimum Ground Clearance	5.9 in. (150 mm)
Overall Vehicle Weight	3,517.0-3,929.3 lbs. (1,595.0-1,782.0 kg) (Weight varies by equipment and trim level.)
Front Approach Angle	S grade: 16.3° SV and SL grades: 16.7°
Rear Departure Angle	S grade: 25.0° SV and SL grades: 25.9°

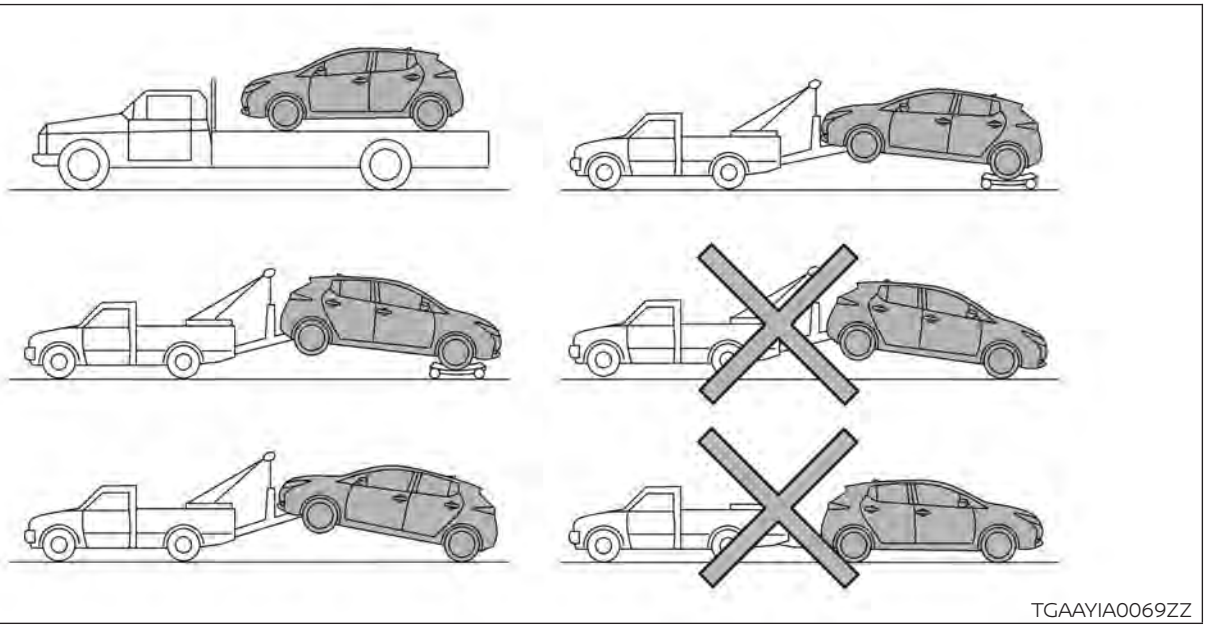
Towing Guidelines

Nissan strongly recommends that LEAF be towed with the driving (front) wheels off the ground or that the vehicle be placed on a flatbed truck.

⚠ CAUTION

- **Never tow with the front wheels on the ground or four (4) wheels on the ground (forward or backward), as this may cause serious and expensive damage to the motor.**
- **Transport the vehicle only after turning the power switch OFF.**
- **When towing this vehicle with the rear wheels on the ground (if you do not use towing dollies), always release the parking brake.**
- **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.**
- **Always pull the cable straight out from the front of the vehicle. Never pull on the vehicle at an angle.**
- **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.**

Perform vehicle towing by holding up drive (front) wheels or on flatbed in order to prevent secondary damage from voltage generated by the motor. In addition, turn the power switch OFF when towing the vehicle. Refer to the following illustration:



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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–44).

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.

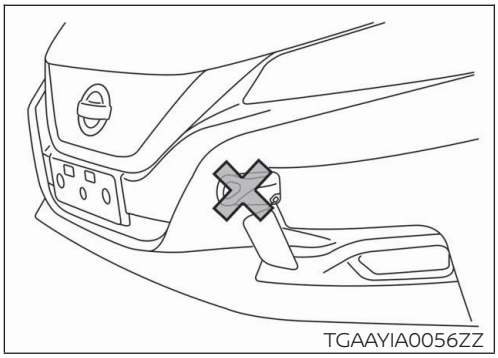
⚠WARNING

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.



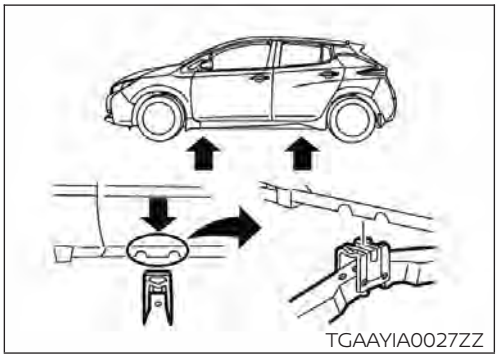
8-1.5 Storing the Vehicle

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-54).

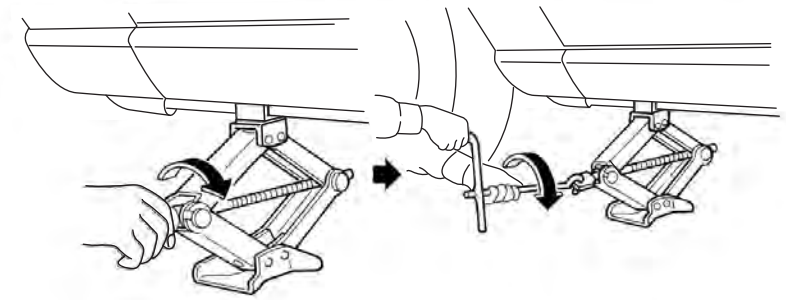
8-1.6 Jacking Up the Vehicle and Changing a Tire

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.

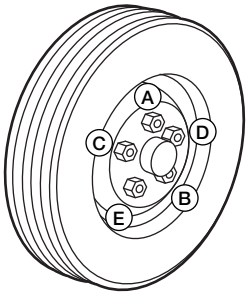
1. Place the jack directly under the jack-up point as illustrated so the top of the jack contacts the vehicle at the jack-up point. Align the jack head between the two notches in the front or the rear as shown. Also fit the groove of the jack head between the notches as shown. The jack should be used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


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2. 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.
3. 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.


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



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5. Securely torque the wheel nuts in an alternating pattern to 83 ft-lbs (113 Nm).

8-1.7 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.**

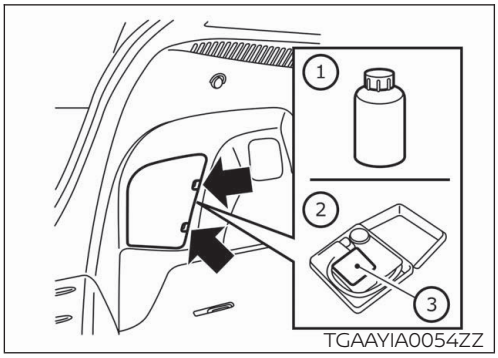
⚠CAUTION

- **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 0.25 in (6 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.**

Remove the emergency tire puncture repair kit from the left side of the cargo area. The kit consists of the following items:

1. NISSAN Genuine Emergency Tire Sealant bottle
2. Air compressor*
3. Speed restriction sticker

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

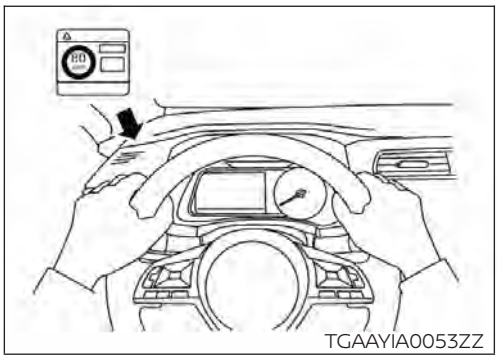


Before Using Emergency Tire Puncture Repair Kit

- 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.

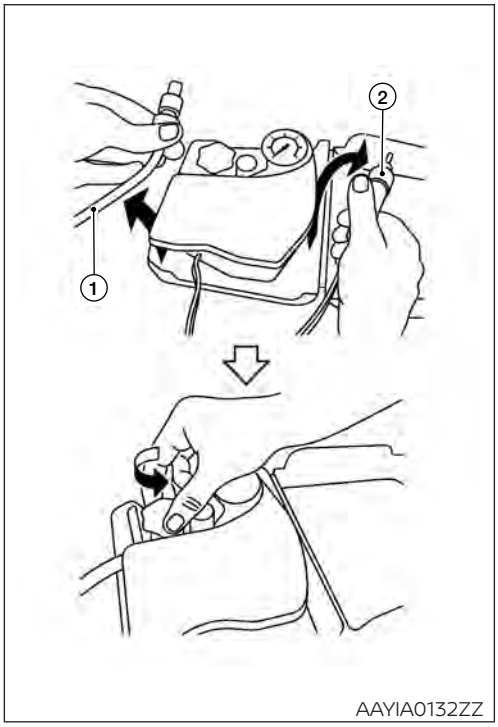
Repairing the Tire

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.


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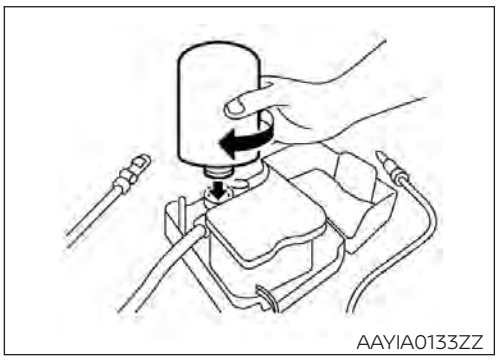
⚠CAUTION Do not obstruct the view of gauges or warning lights with the sticker. Do not put the sticker on the steering wheel pad.

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.



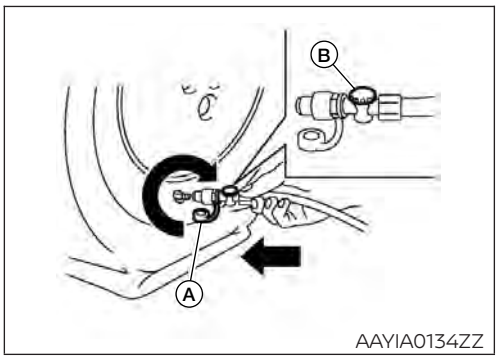
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3. Remove the cap from the tire sealant bottle and screw the bottle clockwise onto the bottle holder. Leave the bottle seal intact. Screwing the bottle onto the bottle holder will pierce the seal of the bottle.


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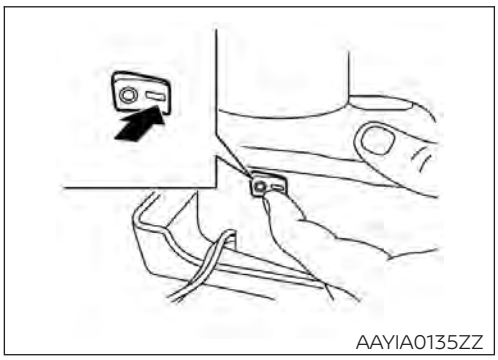
4. Remove the cap from the tire valve on the flat tire.

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.



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6. Push the vehicle power switch to the ACC 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.


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NOTE:
The compressor tire gauge may show a pressure reading of 87 psi (600 kPa) for about 30 seconds while inflating the tire. The pressure gauge is indicating the pressure inside the sealant bottle. When the sealant has been injected into the tire the pressure gauge will drop and indicate actual tire pressure.

⚠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. Securely stow the emergency tire puncture repair kit in the cargo area.

⚠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 other vehicles if the high-voltage battery is severely damaged. There is possibility of delayed fire from a severely damaged high-voltage battery.

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-57)), and a sign put on the vehicle indicating it is an electric vehicle with high-voltage dangers. For example:

DANGER:
HIGH VOLTAGE REPAIR
IN PROGRESS.
DO NOT TOUCH!
Person in charge:_____

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.

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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: 10mm	To remove the service plug access cover bolts. To remove the 12-volt battery terminal bolt.
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

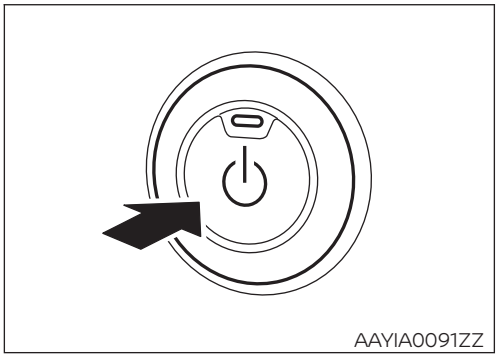
⚠DANGER

- **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.

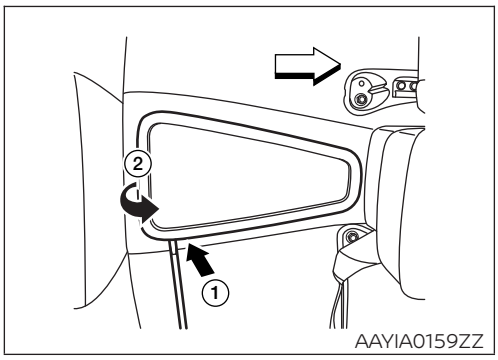
1. Check the READY indicator status. If it is ON, the high-voltage system is active.
2. Place the selector lever in the Park (P) position.
3. Press the power switch once to turn OFF the high-voltage system. Then verify whether the READY indicator is OFF.



4. Insert a suitable tool (**1**) under the RH rear corner of the access trim cover located on the floor behind the center console. Pry up (**2**) and remove.

NOTE:

⇦ : Vehicle front.

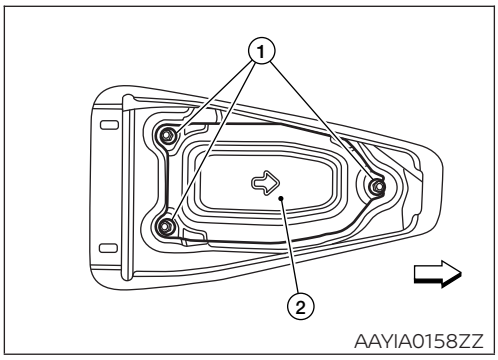


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5. Remove the 10 mm access cover bolts (**1**) and remove the cover (**2**).

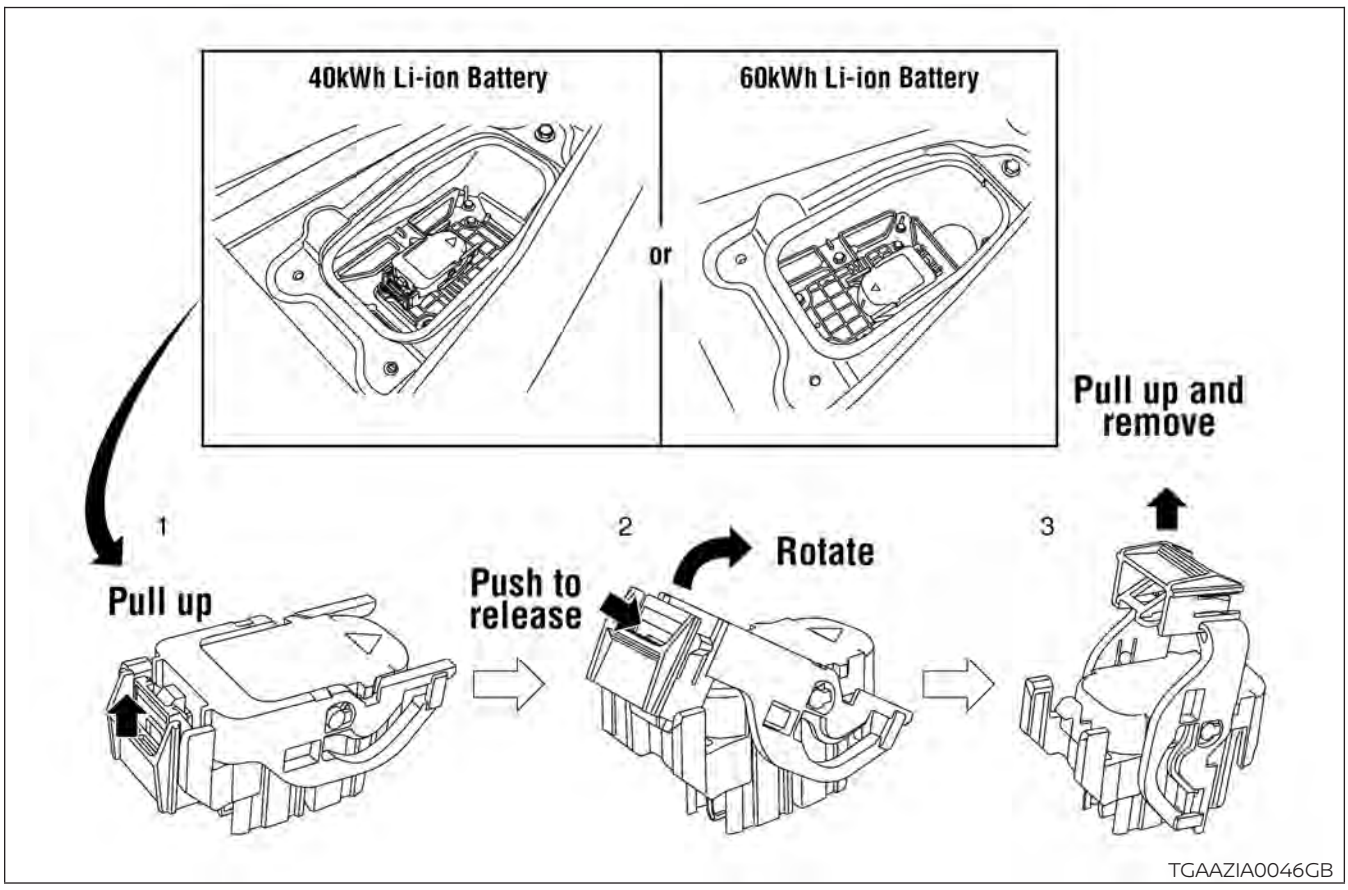
NOTE:

⇦ : Vehicle front.



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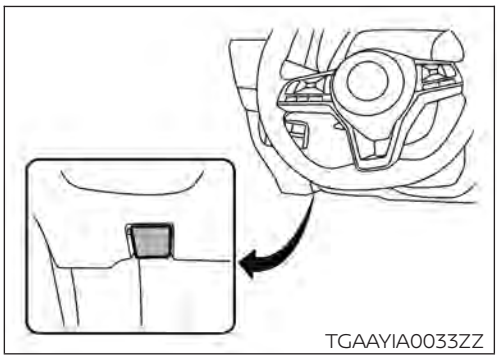
6. Remove the service plug using the following steps: (**1**) pull up and release the green lever, (**2**) press the locking tab to release and rotate fully upward, (**3**) pull the service plug completely out of its socket.



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

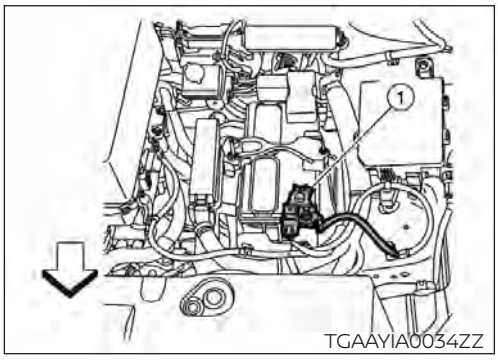
8. Open the hood.


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

   NOTE:

   ⇦ : Vehicle front.



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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-64). 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–55)) 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

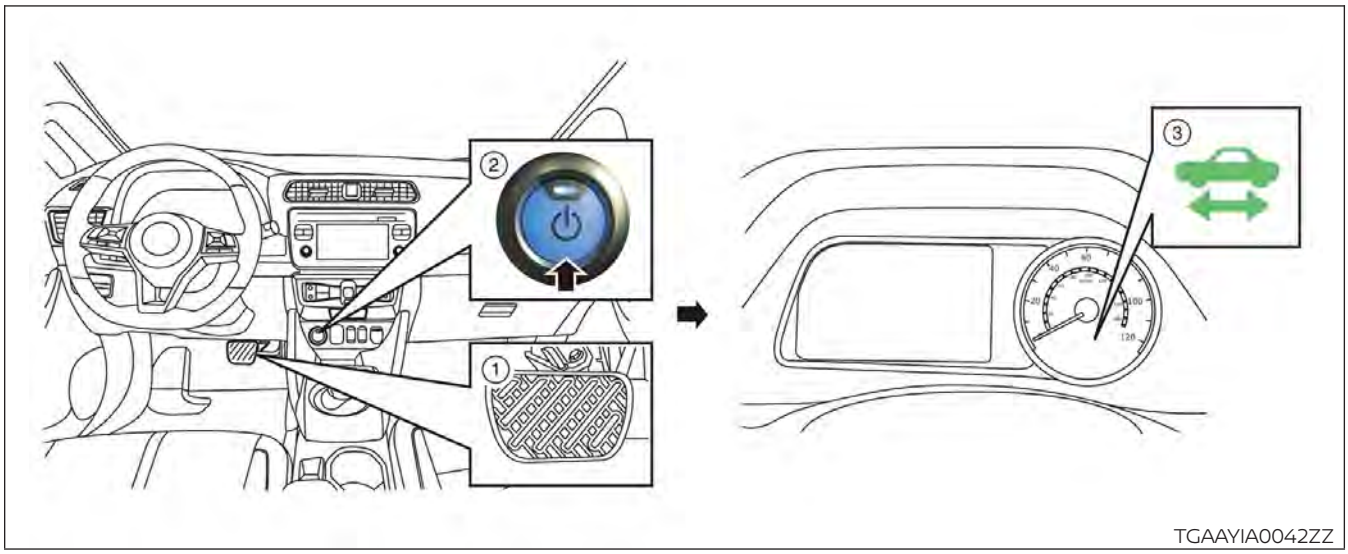
⚠DANGER

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.

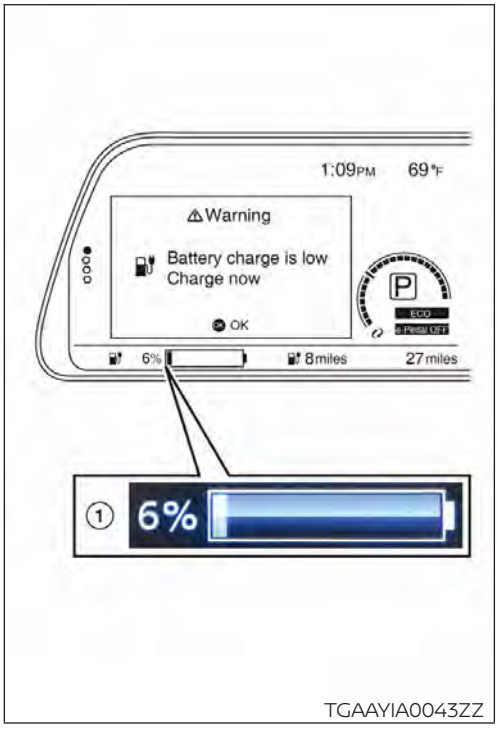
1. Place the selector lever into the Park (P) position.
2. Apply the parking brake.
3. Set wheel chocks to ensure the vehicle is completely immobilized.

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.



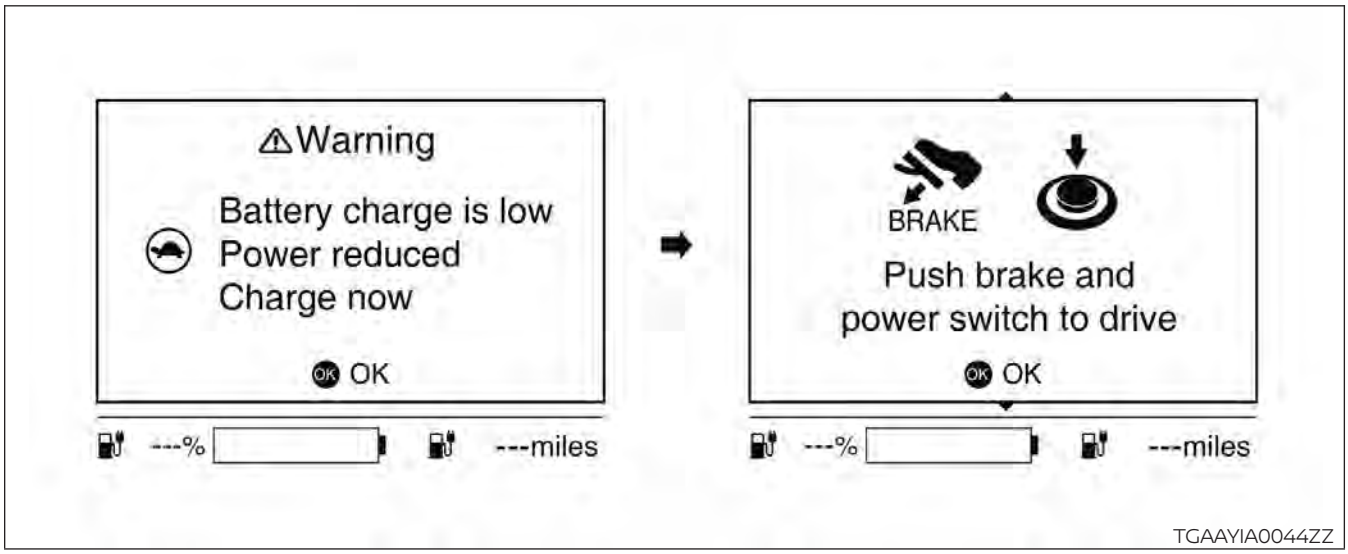
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5. Turn ON electric devices such as headlamps, cabin heater (set to the highest temperature and maximum fan speed; do not use AUTO A/C setting), navigation system and rear window defroster to discharge the high-voltage battery.
6. Monitor high-voltage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



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7. Discharge is complete when the 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.

Please contact following number if the high-voltage battery cannot be discharged.

- Nissan EV Customer Support: 1-877-664-2738
- Nissan Consumer Affairs: 1-800-647-7261 (US) or 1-800-387-0122 (Canada)

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: 10mm	To remove the service plug access cover bolts. To remove the 12-volt battery terminal bolt.
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.

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 3-1.2 Removing the Charge Connector (ERG–21).
- 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–6) 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 3-1.5 Primary Procedure (ERG–24).
- Remove the fuses for the high-voltage control system and disconnect the 12-volt battery. Refer to 3-1.6 Alternate Procedure 1 (Remove Fuses) (ERG–25).
- Remove the service plug and disconnect the 12-volt battery. Refer to 3-1.7 Alternate Procedure 2 (Remove Service Plug) (ERG–27).

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

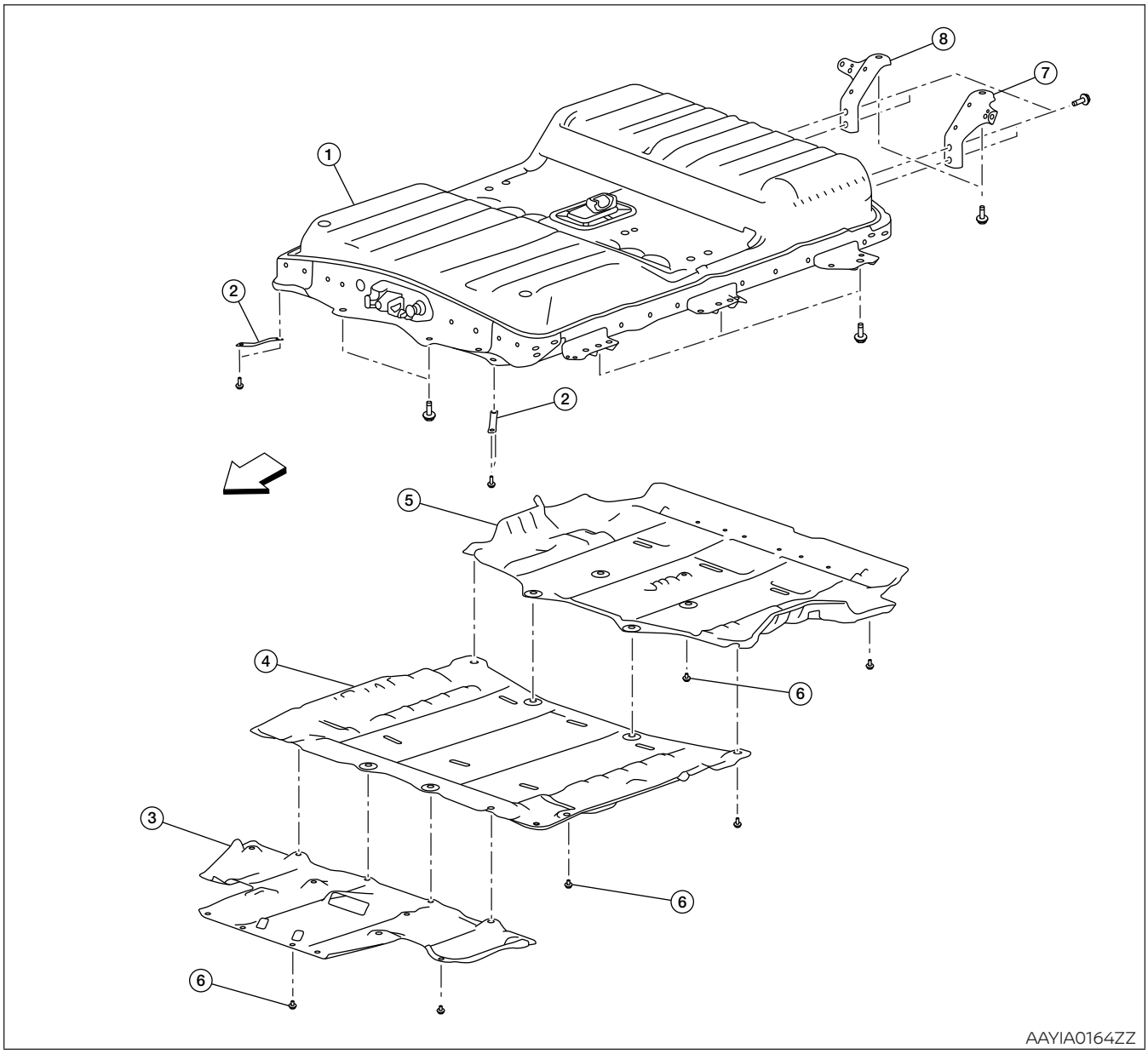
- The colors of the high-voltage harnesses and connectors are all orange. Orange "High-voltage" labels are applied to the high-voltage battery and other high-voltage devices. Do not touch the high-voltage battery or other high-voltage devices without always wearing appropriate PPE.
- Clearly identify 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 retains high-voltage at all times. 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: 40 kWh High-voltage battery



NOTE:

⇦ **: Vehicle front.**

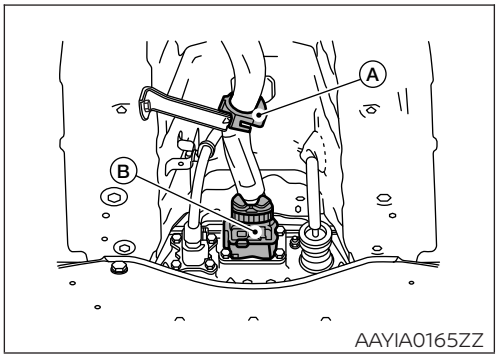
1. High-voltage battery pack	2. Bonding plates	3. High-voltage battery under cover (front)
4. High-voltage battery under cover (center)	5. High-voltage battery under cover (rear)	6. Bolts and clips
7. Battery mounting bracket (left)	8. Battery mounting bracket (right)	

Removal Procedure: 40 kWh High-voltage battery

⚠ DANGER

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

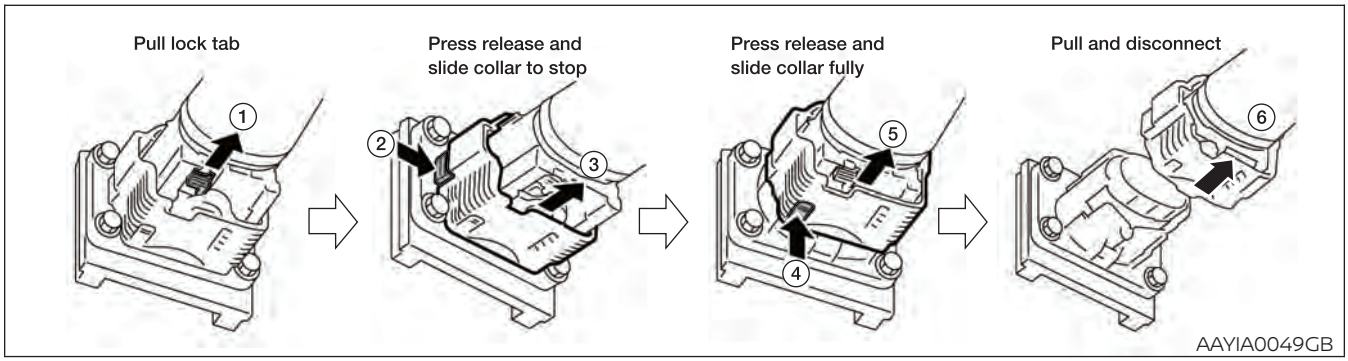
1. Discharge the high-voltage battery. Refer to 8-3.1 Discharging Procedures (ERG-60) .
2. Raise the vehicle and remove the high-voltage battery under covers (front, center and rear).
3. Remove the harness clamp (**A**) and disconnect the high-voltage harness connector (**B**) from the high-voltage battery.



⚠ DANGER

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

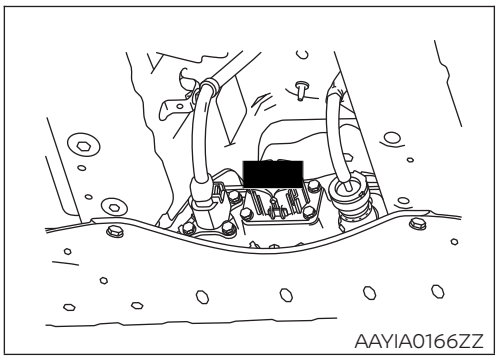
a. Use the following instructions to disconnect the high-voltage harness connector.



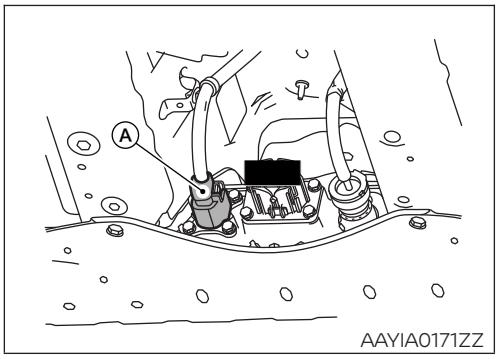
⚠ DANGER

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

: Insulated tape



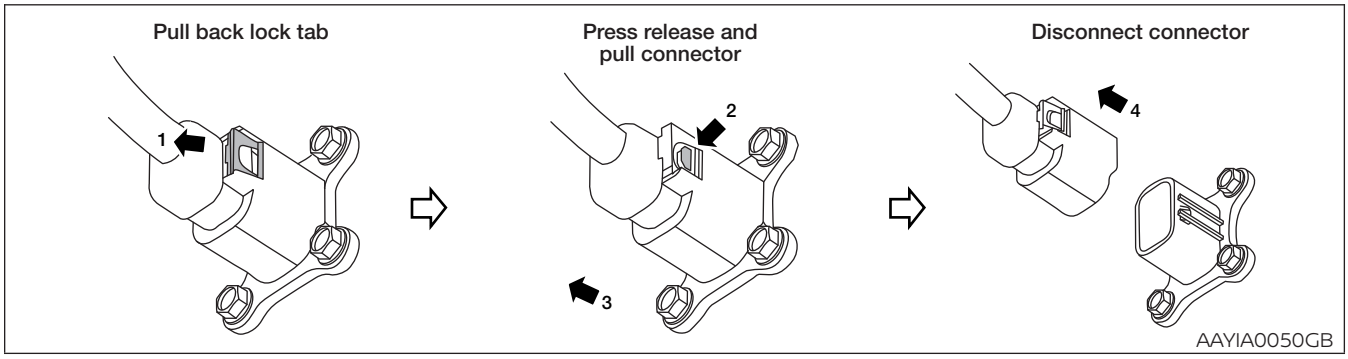
4. Disconnect the cabin heater harness connector (**A**) from the high-voltage battery.



DANGER

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

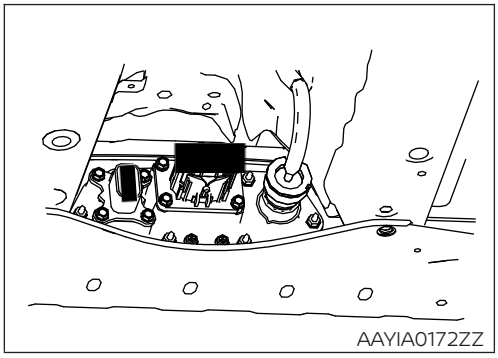
a. Use the following instructions to disconnect the cabin heater harness connector.



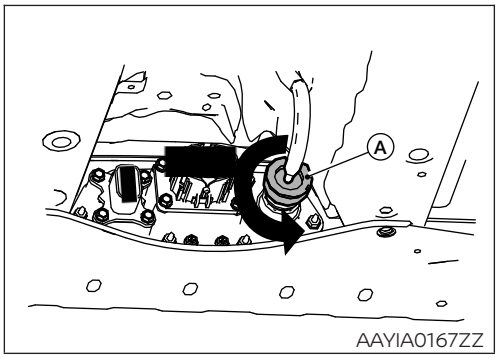
DANGER

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

: Insulated tape



5. Disconnect the high-voltage battery vehicle communications connector (**A**) while turning it counterclockwise.



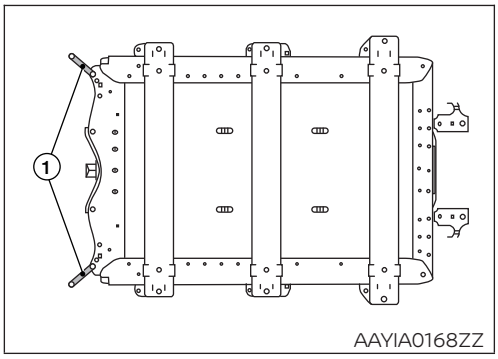
DANGER

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

6. Remove the bonding plates (**1**).

DANGER

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

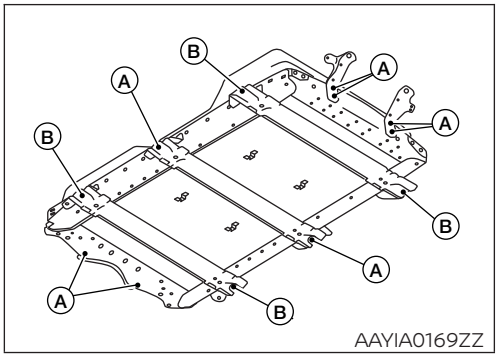


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7. Remove **ONLY** the high-voltage battery mounting bolts (**A**) (8 bolts).

WARNING

At this stage of disassembly, NEVER remove the 4 bolts (B) shown in the illustration. These remaining 4 bolts will retain the high-voltage battery to the vehicle body while the lift table can be set up in the next step.



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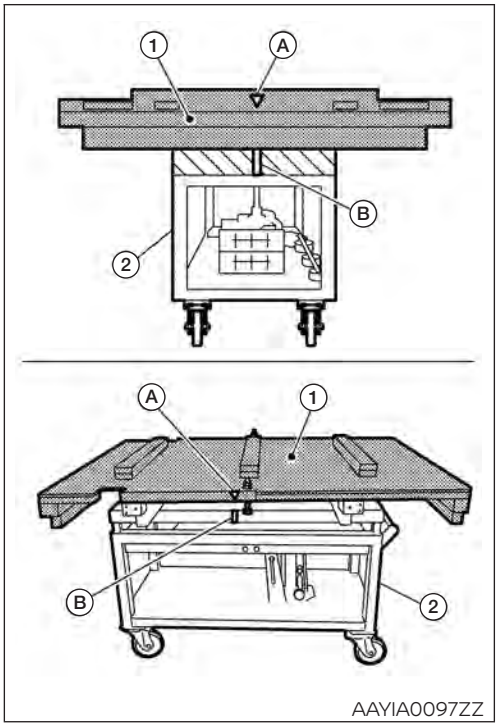
DANGER

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

8. Set the pallet (**1**) onto the lift table (**2**).
   - Align the pallet center mark (**A**) and the lifter center mark (**B**) (white line).

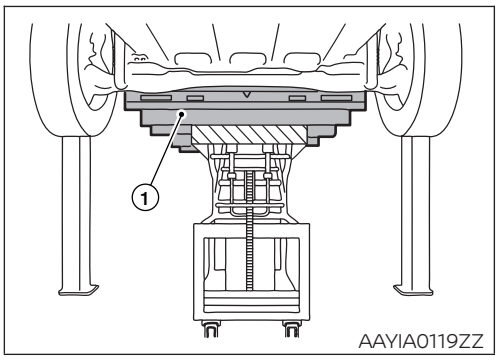
DANGER

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



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9. Set the pallet (**1**) under the high-voltage battery.



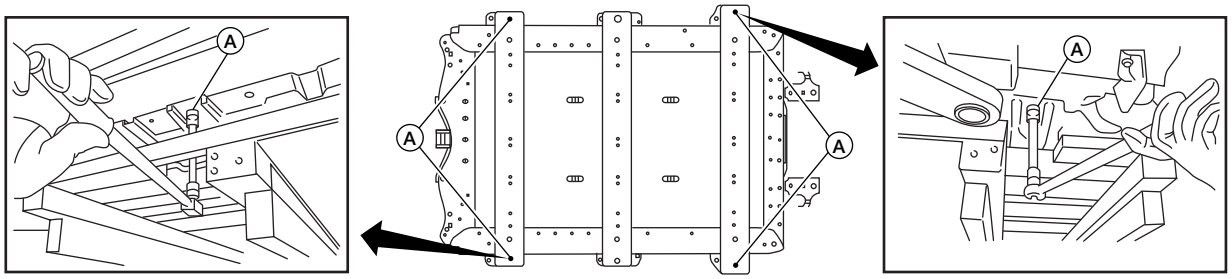
DANGER

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

WARNING

To prevent the battery from falling and possibly result in personal injury, fasten the pallet and battery together with fastening bolts.

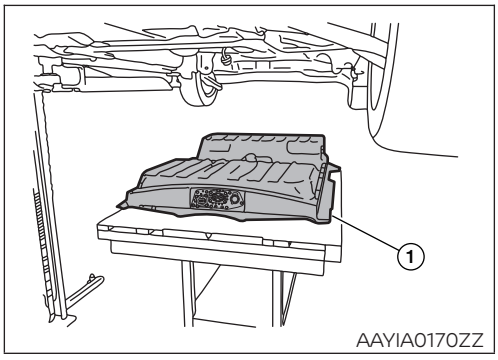
10. Remove the remaining 4 high-voltage battery mounting bolts (**A**).



DANGER

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

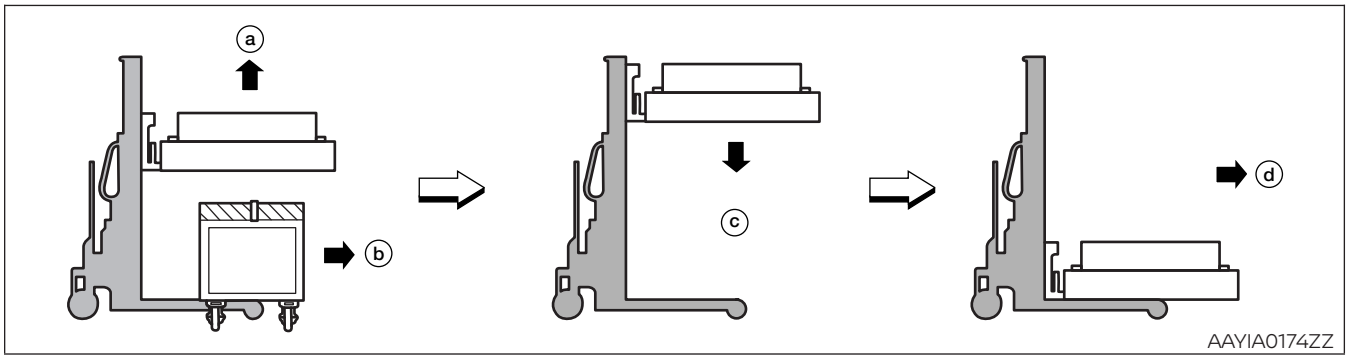
11. Carefully lower the pallet and remove the high-voltage battery (**1**) from the vehicle.



DANGER

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

12. Lower the high-voltage battery from the lift table together with the pallet.
    a. Lift up the high-voltage battery using a stacker.
    b. Move the lift table.
    c. Lower the high-voltage battery.
    d. Operate the stacker and move the high-voltage battery.

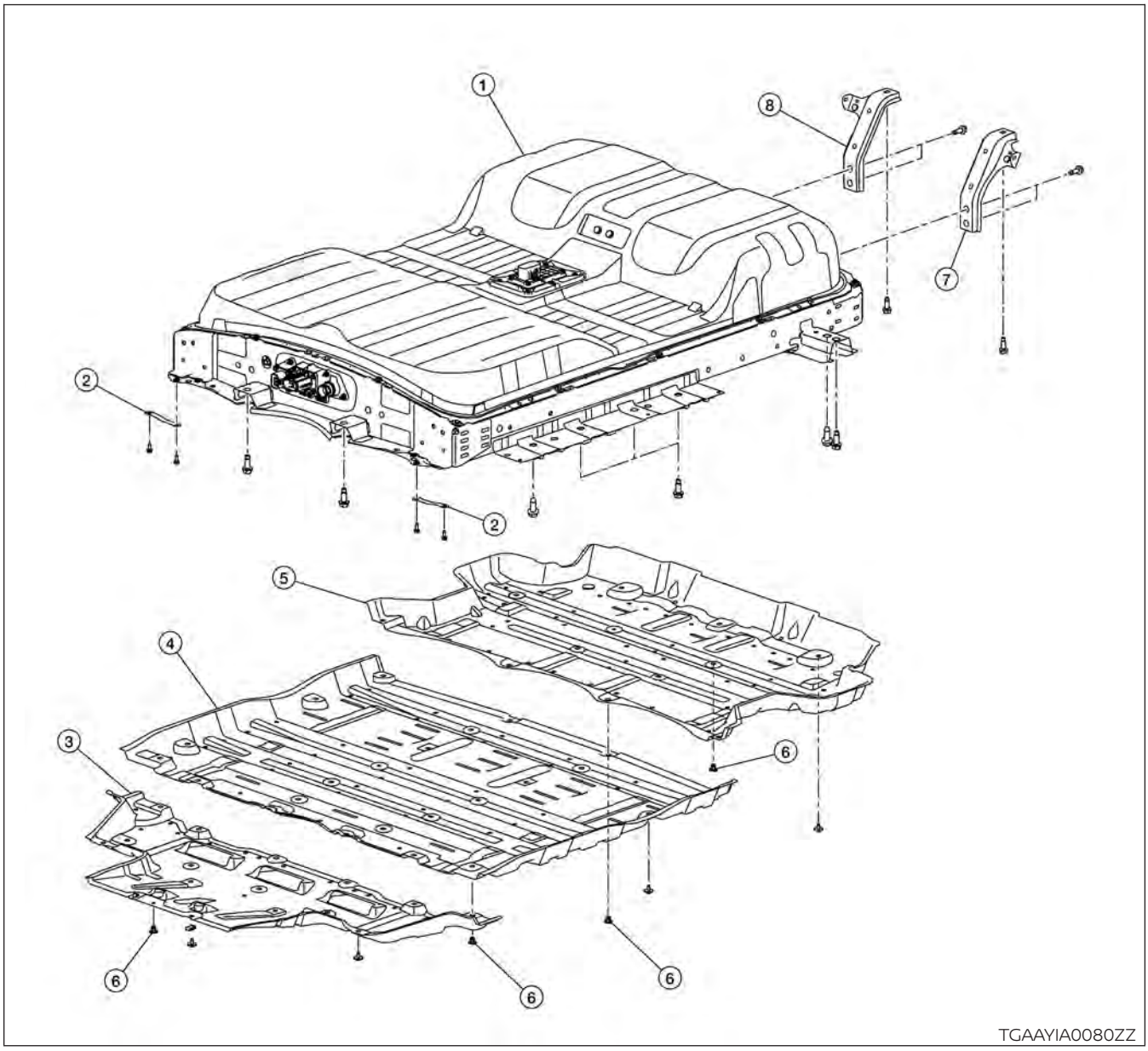


⚠WARNING

To avoid serious personal injury, do not move the stacker while the high-voltage battery is lifted up because there is danger of tipping over.

13. Be sure service plug socket and high-voltage connectors (battery side) are covered with insulated tape.
14. Dismantling the remainder of the LEAF may be performed like conventional Nissan vehicles once the high-voltage system is properly shut down and discharged.

Exploded View: 60 kWh High-voltage battery



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NOTE:

⇦ : Vehicle front.

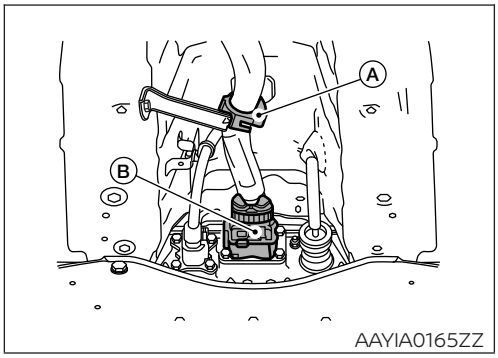
1. High-voltage battery pack	2. Bonding plates	3. High-voltage battery under cover (front)
4. High-voltage battery under cover (center)	5. High-voltage battery under cover (rear)	6. Clip
7. Battery mounting bracket (left)	8. Battery mounting bracket (right)	

Removal Procedure: 60 kWh High-voltage battery

⚠ 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-60) .
2. Raise the vehicle and remove the high-voltage battery under covers (front, center and rear).
3. Remove the harness clamp (**A**) and disconnect the high-voltage harness connector (**B**) from the high-voltage battery.

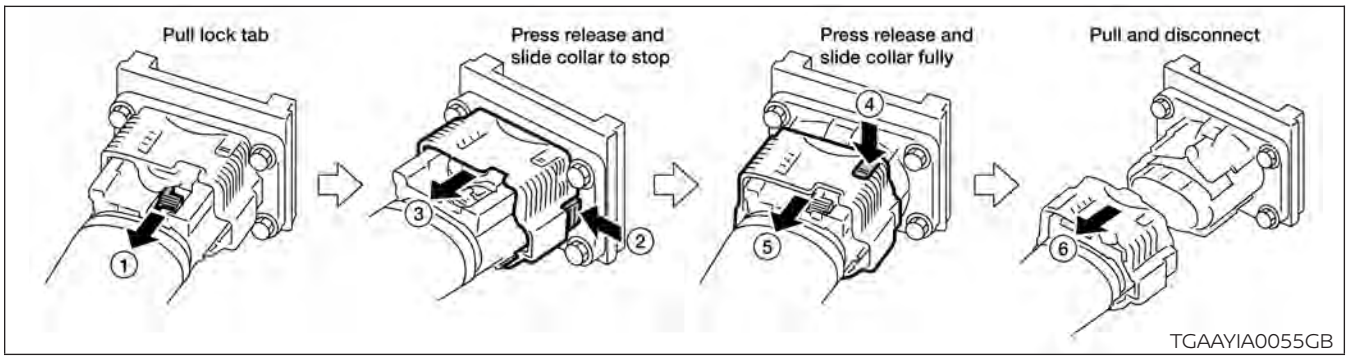


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⚠ DANGER

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

a. Use the following instructions to disconnect the high-voltage harness connector.

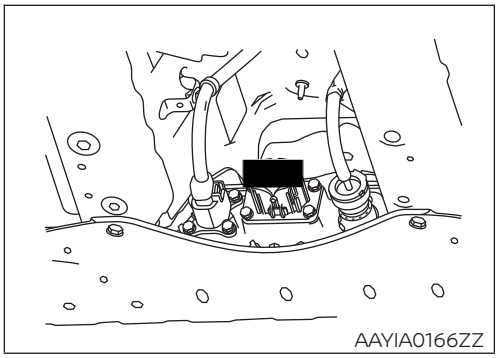


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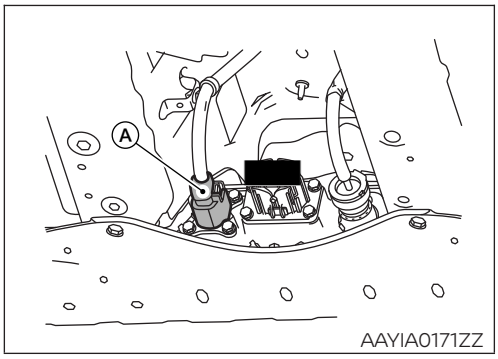
⚠ DANGER

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

: Insulated tape


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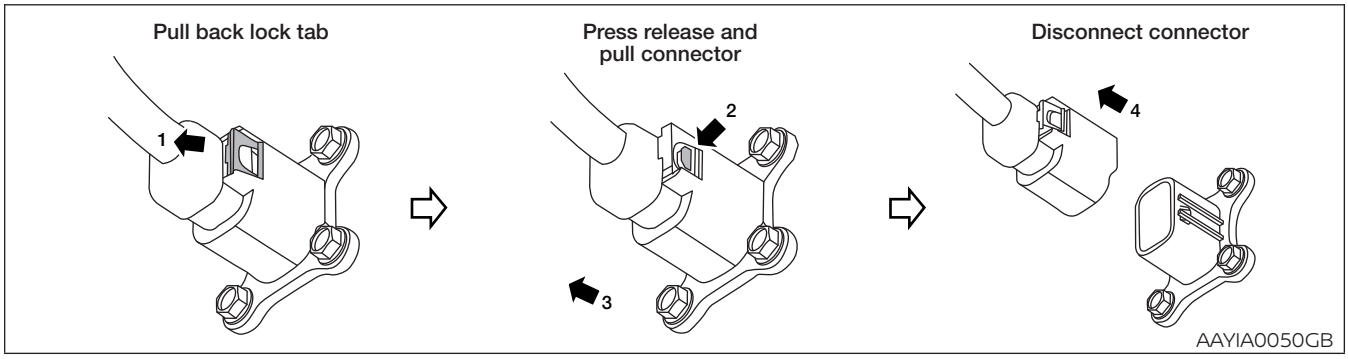
4. Disconnect the cabin heater harness connector (**A**) from the high-voltage battery.



DANGER

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

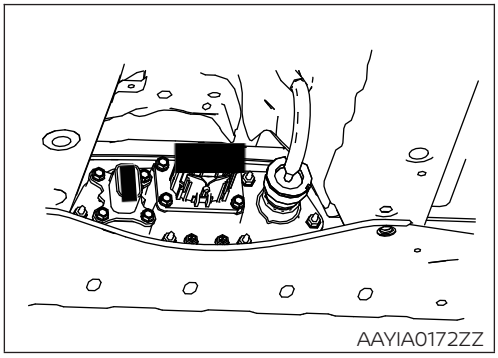
a. Use the following instructions to disconnect the cabin heater harness connector.



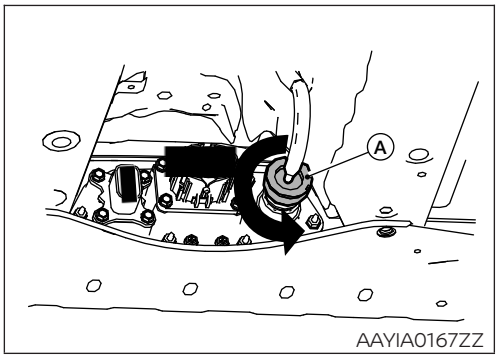
DANGER

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

: Insulated tape



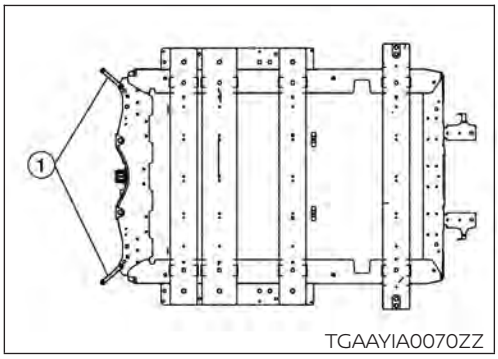
5. Disconnect the high-voltage battery vehicle communications connector (**A**) while turning it counterclockwise.



DANGER

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

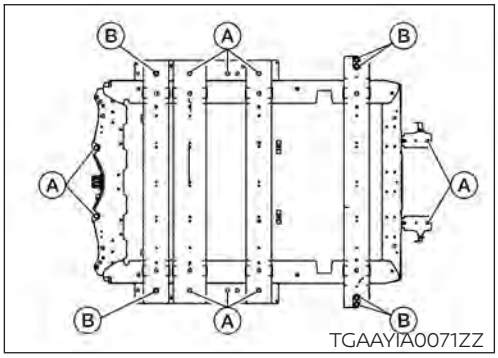
6. Remove the bonding plates (**1**).



DANGER

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

7. Remove **ONLY** the high-voltage battery mounting bolts (**A**) (10 bolts).



WARNING

At this stage of disassembly, NEVER remove the 6 bolts (B) shown in the illustration. These remaining 6 bolts will retain the high-voltage battery to the vehicle body while the lift table can be set up in the next step.

DANGER

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

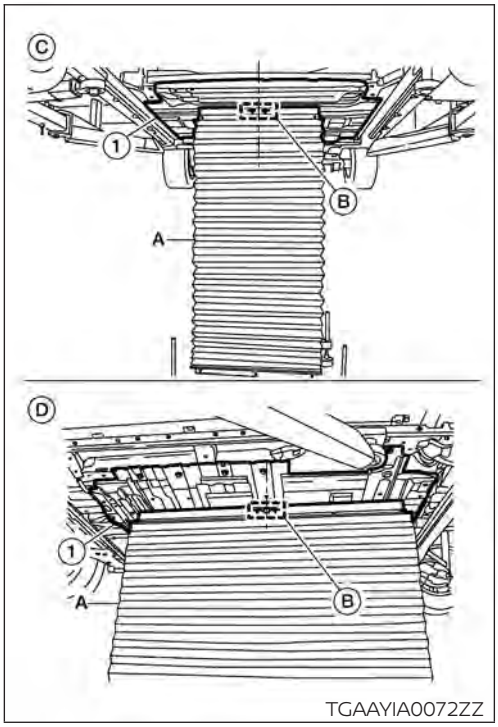
8. Set the lift table under the high-voltage battery.

NOTE:

C. Front of lift table

D. Side of lift table

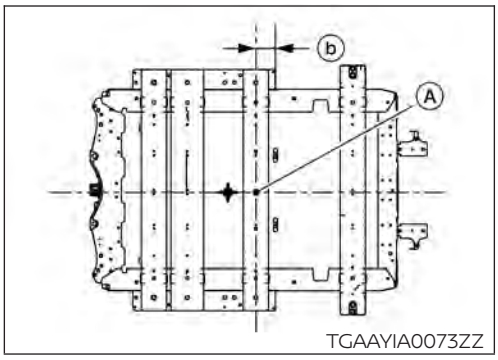
- Align the center mark (**B**) of the lift table (**A**) with the center of gravity of the high-voltage battery (**1**).



NOTE:

A. High-voltage battery center of gravity.

b. 3.62 in (92 mm)

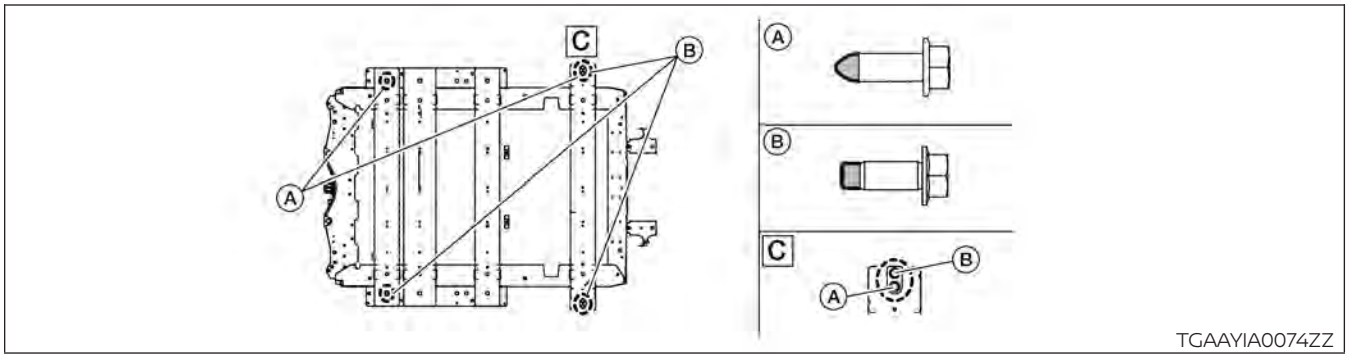


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DANGER

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

9. Remove the 6 high-voltage battery bolts [(**A**) two bolts] and [(**B**) four bolts].

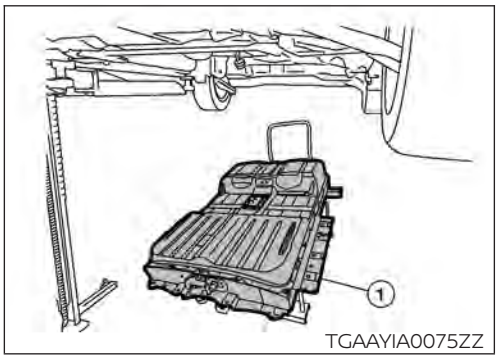


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DANGER

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

10. Carefully lower the lift table and remove the high-voltage battery (**1**) from the vehicle.

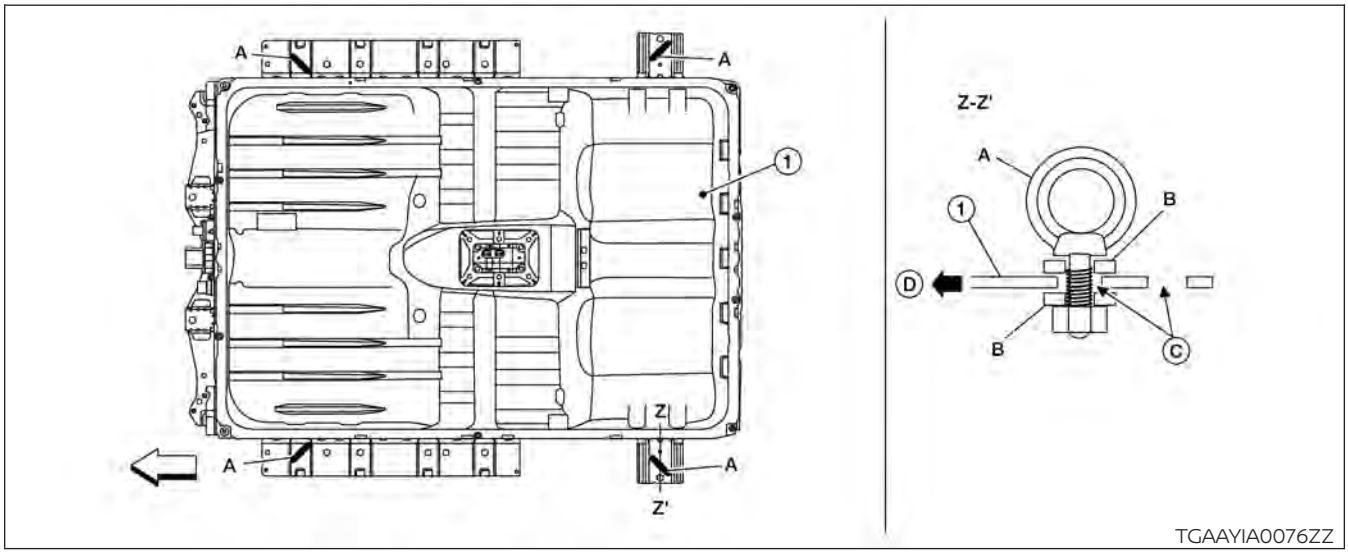


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DANGER

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

11. Follow the procedure below to remove the high-voltage battery from the lift table.
    a. Install the eyebolt (**A**), washer (**B**) and shackle into the bolt mounting hole (**C**) of the high-voltage battery (**1**).



NOTE:

⇦ : Vehicle front.

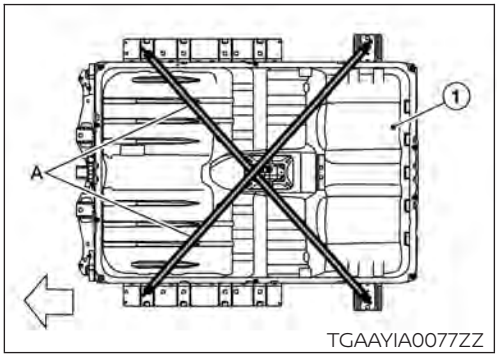
D: High-voltage battery side

- **The eyebolt is attached diagonally toward the center of the high-voltage battery.**
- **Use the inside of the rear bolt mounting hole.**

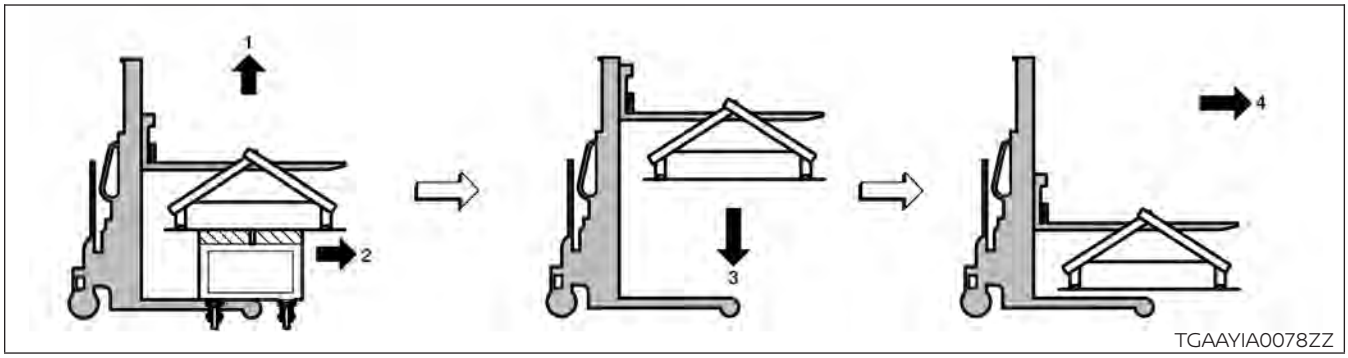
b. Attach the sling belt (**A**) as shown to the high-voltage battery (**1**).

NOTE:

⇦ : Vehicle front.



c. Set the pawl of the stacker on the inside.
d. Place the sling belt on the pawl of the stacker and lift the high-voltage battery.



⚠WARNING

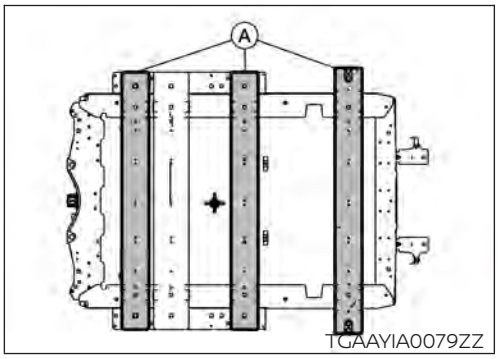
To avoid serious personal injury, do not move the stacker while the high-voltage battery is lifted up because there is danger of tipping over.

e. Move the lift table.
f. Lower the high-voltage battery.
g. Operate the stacker and move the high-voltage battery.

12. Lower the high-voltage battery and remove the sling belt, shackle, eye bolt and washer.

NOTE:

Make sure that piece of wood and other objects hit the position (A) in the figure of the high-voltage battery.



13. Be sure service plug socket and high-voltage connectors (battery side) are covered with insulated tape.
14. Dismantling the remainder of the LEAF may be performed like conventional Nissan vehicles once the high-voltage system is properly shut down and discharged.

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. For assistance in finding your nearest dealer please call Nissan Customer Assistance at:

- Nissan EV Customer Support: 1-877-664-2738
- Nissan Consumer Affairs: 1-800-647-7261 (US) or 1-800-387-0122 (Canada)

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.

NISSAN EMERGENCY CONTACT INFORMATION

- Nissan EV Customer Support: 1-877-664-2738
- Nissan Consumer Affairs: 1-800-647-7261 (US) or 1-800-387-0122 (Canada)

IMPORTANT INFORMATION ABOUT THIS MANUAL

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



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.



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



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

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



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