

ARIYA

Roadside Assistance Guide

SERVICE



Model FEO

XXXXXXX

Foreword

Foreword

This manual describes roadside assistance operations and Important safty 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 roadside assistance operations involving this vehicle. Follow the procedures in order to help assure a safe and successful roadside assistance operation.

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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About The Nissan ARIYA

1. About The Nissan ARIYA

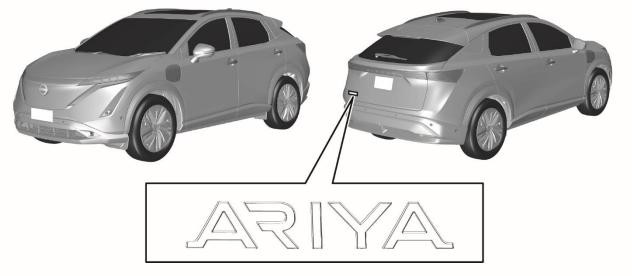
This vehicle uses two types of batteries. One is a 12V battery that is the same as the battery in vehicles powered by internal combustion engines, and the other is the Lithium-ion (Li-ion) battery (high voltage) for the traction motor which propels the vehicle. The Li-ion battery is encased in steel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

The vehicle must be plugged-in in order for the Li-ion battery to be recharged. Additionally, the vehicle system can recharge the Li-ion 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.

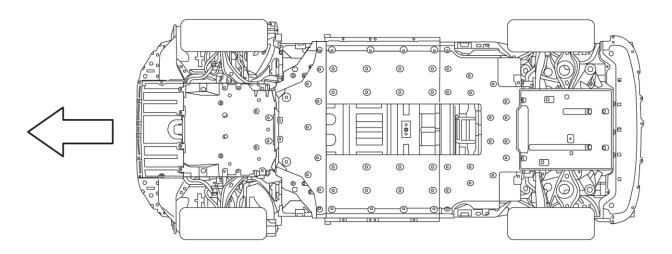
1 - 1 : ARIYA IDENTIFICATION

1 - 1 - 1 : Exterior

The specific exterior identification features are indicated as follows:



RES0446J



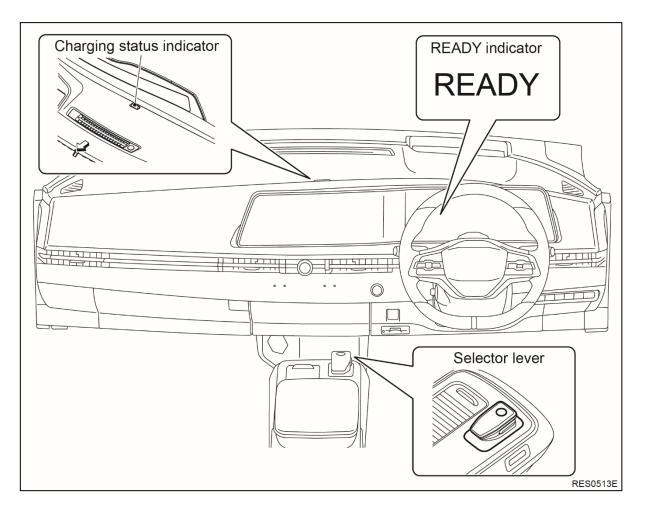
RES0447J

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

Contemporary Series Co

1 - 1 - 2 : Interior Component Location

Interior components referenced in this manual are as follows:



About The Nissan ARIYA

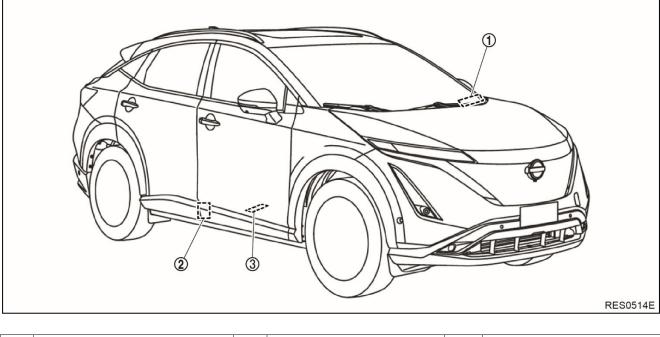
1 - 1 - 3 : Vehicle Identification Number (VIN) Layout

The vehicle identification number can be located as follows:

Example VIN: JN1TAAFE0U0XXXXXX

The ARIYA is identified by the 5th alphanumeric character: A

A = Electric vehicle (AM67 motor)



1.	Vehicle identification	2.	Vehicle identification	3.	Vehicle identification
	number (chassis number)		Label		number plate

About The Nissan ARIYA

1 - 1 - 4 : Warning and Indicator Lamp Information

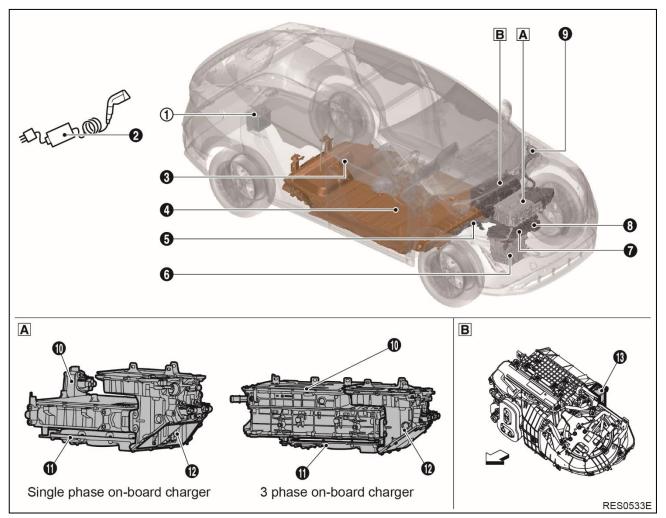
Lamp Name	Icon	Description	
READY Indicator	READY	This lamp is on when the EV system is powered up and the vehicle is ready to drive.	
EV System Warning Lamp	<u></u>	 Malfunction has occurred in the EV system and/or Emergency shut-off system has been activated. The shutoff system activates in the following 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 dot matrix LCD.	
Master Warning Lamp (YELLOW)		 This lamp is on when: Li-ion 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. 	

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

Basic High Voltage System and 12V System Information

2. Basic High Voltage System and 12V System Information

2 - 1 : HIGH VOLTAGE-RELATED AND 12V-RELATED COMPONENT LOCATIONS AND DESCRIPTIONS



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

C : Vehicle front

No.	Component	Location	d 12V System Information Description
1	12-volt Battery	Under luggage room	A lead-acid battery that supplies power to the low voltage devices.
0	Charge cable & charge connector	Charge port	 Used when charging lithium-ion batteries. Connect the charging connector at the end of the charging cable to the connection port of the charging port. (If so equipped)
€	Service plug	Under rear seat	Isolates the battery from the rest of the high- voltage electrical system.
4	Li-ion (Lithium ion) battery	Undercarriage	Stores and outputs DC power needed to propel the vehicle. Coolant is circulated to control battery temperature, and battery coolant coolers and battery coolant heaters (PTC heaters) are used to control coolant temperature.
0	High-voltage cables (orange color)	Under hood and undercarriage	Orange-colored power cables carry high voltage current between each of the high voltage components.
0	Traction motor	Motor room	Converts three-phase AC power to drive power (torque) which propels the vehicle.
0	Inverter	Motor room	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.
8	Electric air conditioner compressor	Motor room	Exclusive use motor operated with high voltage compresses refrigerant gas for high pressure.
0	Charge port	Vehicle left side	Connecting port for EVSE (Electric Vehicle Supply Equipment). Ports are available: Normal charge and quick charge.
0	On Board Charger	Motor room	The On Board Charger converts AC power from a power outlet to DC power and increases the voltage in order to charge the high-voltage battery.
0	DC/DC Converter	Motor room	The DC/DC converter reduces the voltage of the high-voltage battery to provide power to the 12-volt battery.
0	High voltage junction box	Motor room	The high voltage junction box provides electric power from the high-voltage battery to all high- voltage parts of the vehicle.
B	PTC heater	Built in A/C unit in the instrument panel	A dedicated heater that operates at high voltage heats the air for heating. PTC : (Positive Temperature Coefficient)

Basic High Voltage System and 12V System Information

Basic High Voltage System and 12V System Information

2 - 1 - 1 : Li-ion Battery Pack Specifications

Li-ion battery voltage	353V normal (B6 model)
	352V normal (B9 model)
Number of Li-ion battery modules in the pack	12 (B6 model)
	16 (B9 model)
Li-ion battery dimensions	2099.4 x 1456 x 384.6 mm
	(82.65 x 57.32 x 15.14 in.)
Li-ion battery weight	450.7 kg (993.8 lbs.) (B6 model)
	578 kg (1274.5 lbs.) (B9 model)

2 - 2 : 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 components 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 label shown below. All high voltage harnesses are coated in orange.	

2 - 2 - 1 : Warning Label



TGAAYIA005

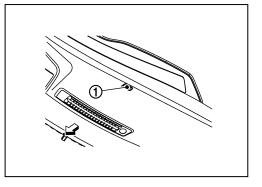
3. Roadside Assistance Response Steps

- A NEVER assume the ARIYA is shut OFF simply because it is quiet.
- If the vehicle is damaged and you are not sure about the condition of the electric vehicle system, contact first responders immediately. If the vehicle is damaged, the high voltage system should be shut down by first responders while following the procedures in the First Responders Guide and while wearing appropriate Personal Protective Equipment (PPE).
- A If the READY indicator or charging indicator are ON, the high voltage system is active.
- A If possible, make sure that the READY indicator on the instrument cluster and the charging status indicator on the top of the instrument panel are OFF and the high voltage system is shut down.
- Some of the under hood parts get hot and may cause serious burns. Use caution when working on or around these parts.

3 - 1 : INDICATIONS THE HIGH VOLTAGE SYSTEM IS ON

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

└> Vehicle front

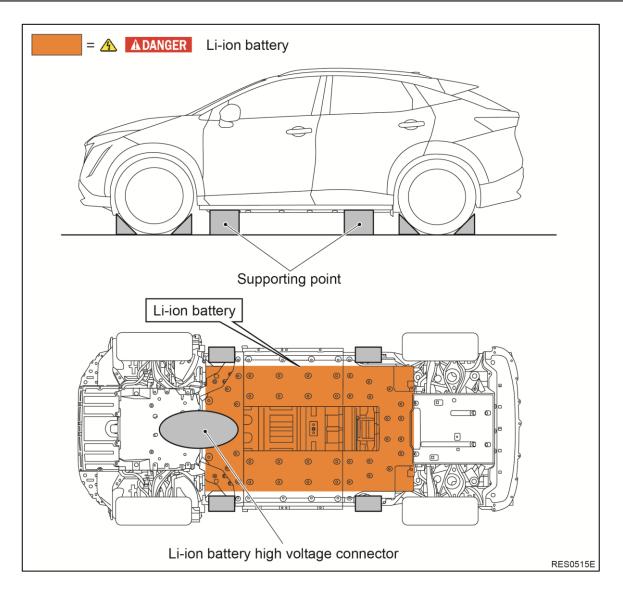


Before disconnecting the 12V battery terminal, if necessary, lower the windows, unlock the doors, and open the rear hatch as required. Once 12V battery is disconnected, power controls will not operate.

3 - 2 : VEHICLE IMMOBILIZATION AND STABILIZATION

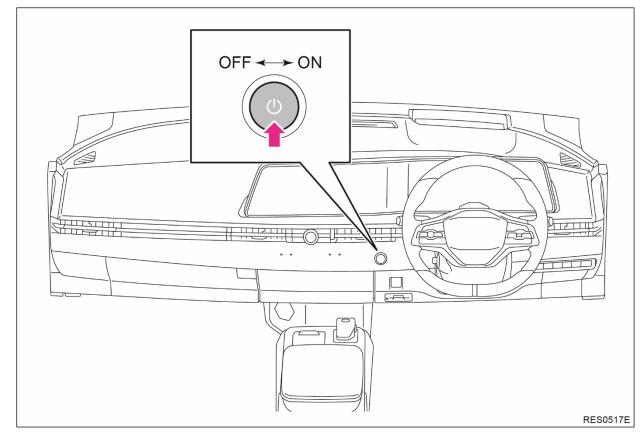
If possible, immobilize the vehicle by turning the 12V system OFF and stabilize it with a wheel chock(s). Stabilize the vehicle with wooden blocks or by removing air from the tires.

- Do not stabilize the vehicle with cribbing under the Li-ion battery.
- To avoid electrical shock:
- Do not put wheel chock(s) under the high voltage components and harnesses.
- Do not put Lift Airbag Equipment for rescue under the high voltage harnesses and connector of Li-ion battery.
- Do not put any equipments for rescue under the high voltage components and harness when inside of high voltage components or harnesses are exposed.

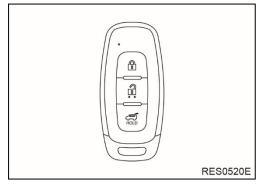


3 - 3 : TURNING OFF THE POWER SWITCH

- 1. Check the READY indicator status. If it is ON, the high voltage system is active.
- 2. Press the power switch once to turn OFF the high voltage system. Then verify whether the READY indicator and charging status indicator are OFF.



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



3 - 4 : WATER SUBMERSION

A DANGER

A 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.

- A 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.
- A If the vehicle is in the water, to avoid electrical shock do not touch the high voltage components, harnesses or service plug.

Only first responders wearing appropriate Personal Protective Equipment (PPE) should shut down the vehicle. After shut down, standard towing/recovery procedures can be used. <u>Refer to TOWING</u>.

3 - 5 : VEHICLE FIRE

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

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

In case of vehicle fire, contact fire department immediately and extinguish the fire if possible. 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.

3 - 6 : LI-ION BATTERY DAMAGE AND FLUID LEAKS

The Li-ion 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.
- 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.

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.

Li-ion Battery Electrolyte Solution Characteristics:

- Clear in color
- Sweet odor
- Similar viscosity to water
- Since the Li-ion 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.

4. Roadside Assistance

4 - 1 : JUMP STARTING

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



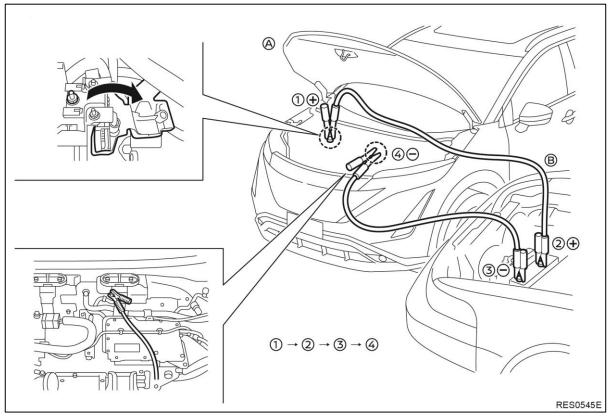
If done incorrectly, jump starting can lead to a 12V battery explosion, resulting in severe personal injury or death. It could also damage your vehicle.

Discharged 12V 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 Li-ion battery cannot be charged.
- The vehicle cannot be shifted out of PARK normally.

- To avoid electrical shock, the high voltage Li-ion battery CANNOT be jump started.
- Explosive hydrogen gas is always present in the vicinity of the 12V battery. Keep all sparks and flames away from the 12V battery.
- Do not allow battery fluid to come into contact with eyes, skin, clothing or painted surfaces. Battery fluid is a corrosive sulfuric acid solution that can cause severe burns. If the fluid comes into contact with anything, immediately flush the contacted area with water.
- The booster battery must be rated at 12 volts. Use of an improperly rated battery can damage the vehicle.
- Whenever working on or near a 12V 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 12V battery when jump starting.
- Do not attempt to jump start a frozen battery. It could explode and cause serious injury.
- ARIYA is equipped with an automatic cooling fan. It could come on at any time. Keep hands and other objects away from it.
- 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.
- Always follow the jump starting instructions below. Failure to do so could result in damage to the DC/DC converter and cause personal injury.

- Do not use ARIYA to jump start another vehicle.
- Do not attempt to perform a jump start on the 12V battery at the same time that the Li-ion battery is being charged. Doing so may damage the vehicle or charging equipment and could cause an injury.



4 - 1 - 1 : Jump Starting Procedures

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

DO NOT allow the two vehicles to touch.

- 2. Apply the parking brake.
- 3. Push the park button on the shift lever to place the vehicle in the P (Park) position.
- 4. Switch off all unnecessary electrical systems (headlights, heater, air conditioner, etc.).
- 5. Place the power switch in the OFF position.
- 6. Remove the vent caps (if so equipped) on the 12-volt battery. Cover the battery with a firmly wrung out moist cloth to reduce the hazard of an explosion.
- 7. Connect jumper cables in the sequence as illustrated ($1 \rightarrow 2 \rightarrow 3 \rightarrow 4$).

- Always connect positive (+) to positive (+) and negative (-) to body ground (for example, as illustrated), not to the 12V 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.
- 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 before pushing the power switch.
- 8. Start the engine of the booster vehicle (B).
- 9. While the booster vehicle engine is running, place the power switch in the READY to drive position.

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 $(4 \rightarrow 3 \rightarrow 2 \rightarrow 1)$. Keep the EV system on for over twenty (20) minutes to charge the 12V battery.
- 11. Replace the vent caps (if so equipped). Be sure to dispose of the cloth used to cover the vent holes because it may be contaminated with corrosive acid.
- 12. If necessary, connect the vehicle to a charging station or EVSE (Electric Vehicle Supply Equipment) to charge the Li-ion battery. The vehicle cannot be driven unless the Li-ion battery is charged.

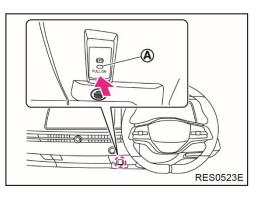
NOTE : If it is not possible to turn the system ON by following this procedure, contact a NISSAN certified electric vehicle dealer immediately.

4 - 2 : ELECTRIC PARKING BRAKE RELEASE PROCEDURES

4 - 2 – 1 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. The indicator light (**A**) will turn OFF.



- 2. Check that the electric parking brake indicator light (P) goes out.
- 3. If the electric parking brake indicator light remains illuminated or parking brake cannot be released, refer to 4-2.2 Releasing Electric Parking Brake Where Parking Brake Switch Cannot Be Used, in this section.

Roadside Assistance

4 - 2 - 2 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.

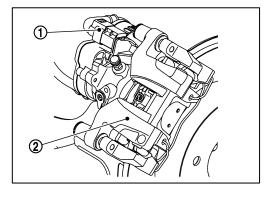
AWARNING

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

AWARNING

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

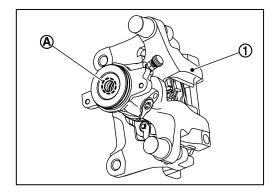
- 1. Disconnect the parking brake actuator harness connector
- (1) from the rear caliper assembly (2).



- caliper assembly (2).

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

3. Rotate the rear brake caliper assembly (1) spindle part (A) clockwise.



Roadside Assistance

4 - 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 or 12V battery is low, ARIYA automatically shifts to P position.

NOTE : To immobilize Vehicle, use wheel chocks.

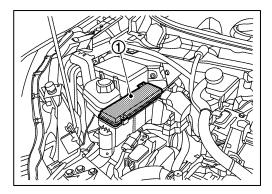
- The park lock is activated when power switch is OFF. If the vehicle must be unavoidably moved with front wheel on the ground or four wheel on the ground, release the park lock and hold the park lock in the released status (N position).
- For maintaining N position status, perform the following work. If the vehicle is moved without performing the following work, serious accident may be caused.
- 1. 12 V electric power is supplied with booster cable to the 12V battery.
- 2. Set the power switch to ON without depressing brake pedal.

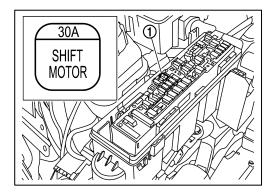
Never set the vehicle to READY state.

- 3. Check that parking brake is activated. (Check that indicator lamp for parking brake is ON.)
- 4. Select N position.
 - Close all doors, depress brake pedal and shift to "N" position. After maintaining this status some time, check that shift position indicator is indicated to "N" position.
- 5. Open hood and remove fuse and fusible link block cover (1).

NOTE : When the door is open in the N position, the warning chime is sounded.

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





7. Release parking brake.

The vehicle must be fixed with tire stopper etc.

- 8. Set the power switch to OFF.
- 9. Release the parking brake before moving the vehicle.
- 10. Move the vehicle while power switch is OFF.

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

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

4 - 3 - 1 : Procedure of Recovery to The Normal State After Completion of Work

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

4 - 4 : TOWING

4 - 4 - 1 : Vehicle Specifications

Length	4,595 mm (180.9 in.)
Width	1,850 mm (72.8 in.)
Overall Height	1,660 mm (65.4 in.)
Wheel Base	2,775 mm (109.3 in.)
Minimum ground clearance	168 - 178 mm (6.6 - 7.0 in.)
Overall vehicle weight	1,905 - 2,112 kg (4,200 - 4,657 lbs.)
	(Weight varies by equipment and trim
	level.)
Front approach angle	17.5 - 17.6°
Rear departure angle	22.6 - 22.9°

4 - 4 - 2 : Towing Guidelines

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

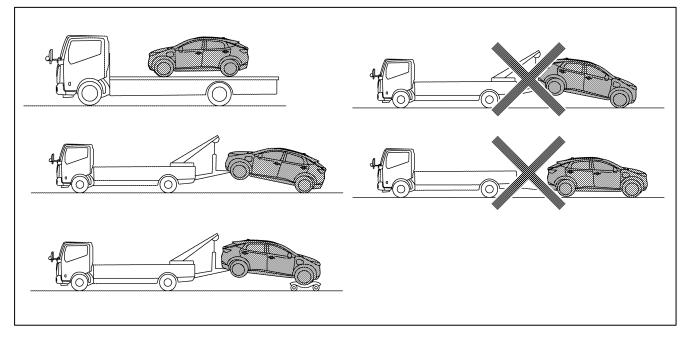
- Never tow with the front wheels on the ground or four (4) wheels on the ground (forward or backward), as this may cause serious and expensive damage to the motor.
- Transport the vehicle only after turning the power switch OFF.
- When towing with the front wheels on towing dollies:

- Place the power switch in the ON position. Secure the steering wheel in the straight ahead position with a rope or similar device.

- Place the shift lever in the N (Neutral) position.

- 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 vehicle recovery hook or 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 or recovery 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.
- All applicable state or Provincial laws and local laws regarding the towing operation must be obeyed.
- When towing, make sure that the axles, steering system and powertrain are in working condition. If any unit is damaged, dollies or flatbed tow truck must be used.

NISSAN recommends that the vehicle be towed with the driving (front) wheels off the ground or that the vehicle be placed on a flatbed truck as illustrated.

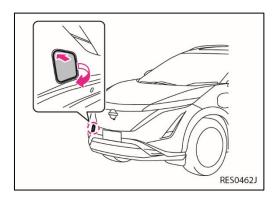


NOTE :

- It is also permissible to transport the ARIYA facing rearward on a flatbed.
- If the vehicle cannot be placed in Neutral, a P (Park) release procedure may be required. <u>Refer to P (PARK) POSITION RELEASE PROCEDURE</u>.
- 4 4 3 : Use of Vehicle Equipped Hooks for Recovery Operations

Front

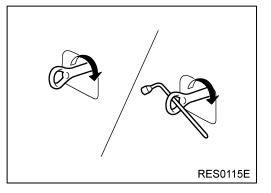
1. Using a suitable tool wrapped with a protective cloth, remove the recovery hook cover from the bumper.



2. Securely install the recovery hook as illustrated. The recovery hook is located in the tool kit in the trunk room.



Failure to securely install the recovery hook may result in serious personal injury or death and/or vehicle damage.



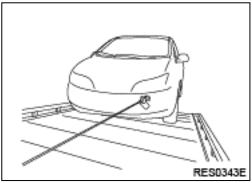
3. Attach the winch cable securely to the recovery hook.

Failure to securely attach the winch cable to the recovery hook may result in serious personal injury or death and/or vehicle damage.

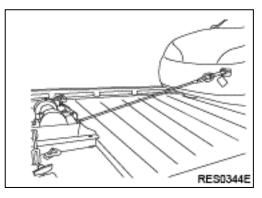
- 4. Make sure the winch cable remains fully connected to the recovery hook and does not interfere with surrounding area, take up the slack from the cable.
- 5. Release the parking brake.
- 6. Place the selector lever in the N (Neutral) position.

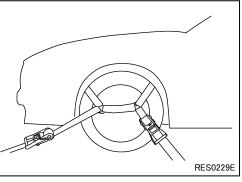
Roadside Assistance

- NOTE : If the vehicle cannot be placed in Neutral, a P (Park) release procedure may be required. <u>Refer to P (PARK) POSITION</u> <u>RELEASE PROCEDURE</u>.
 - 7. Carefully pull the vehicle onto the flatbed.



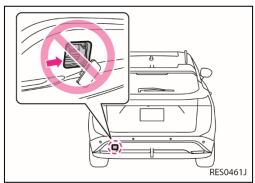
- Be careful not to pull the vehicle too close to the winch. Doing so will cause excessive downward force being applied to the recovery hook. Too much downward force may result in vehicle damage. Lower the flatbed and finish rolling the vehicle forward if necessary.
- 9. Secure the vehicle to the flatbed by using wheel baskets at all 4 wheel positions.
- 10. Make sure that the vehicle recovery hook is properly secured in its original position after use and the recovery hook cover has been reinstalled properly.





Rear Tie Down Hook

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



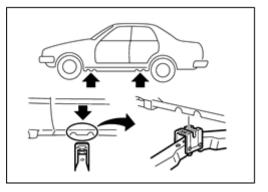
4 - 5 : STORING THE VEHICLE

If ARIYA 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. <u>Refer to Storing the Vehicle</u>.

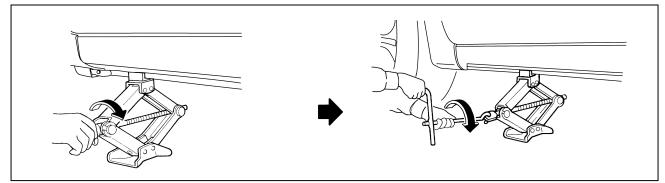
4 - 6 : JACKING UP THE VEHICLE AND CHANGING A TIRE

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

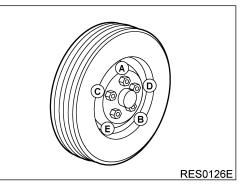
1. Place the jack directly under the jack-up point as illustrated so the top of the jack contacts the vehicle at the jack-up point. Align the jack head between the two notches in the front or the rear as shown. Also fit the groove of the jack head between the notches as shown. The jack should be used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



- 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.



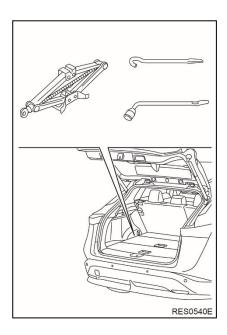
4. Install new or repaired tire and hand-tighten the wheel nuts. Then tighten the wheel nuts with wheel nut wrench in an alternating pattern.



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

4 - 7 : TOOLS INSTALLED IN THE VEHICLE

The tools are located in the inside the cargo area. The jack is a ARIYA dealer option and not equipped as standard.



Roadside Assistance

4 - 8 : REPAIRING A FLAT TIRE WITH NISSAN EMERGENCY TIRE PUNCTURE REPAIR KIT

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

AWARNING

- After using the Emergency Tire Sealant to repair a minor tire puncture, do not drive the vehicle at speeds faster than 50MPH (80km/h).
- Immediately after using the Emergency Tire Sealant to repair a minor tire puncture, it is
 recommended you visit a NISSAN certified ARIYA 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 ARIYA 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.

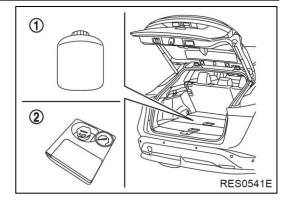
ACAUTION

- 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 ARIYA vehicle. Do not use it on other vehicles.
 - Only use the kit to inflate the tires of the ARIYA 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 ARIYA 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.

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

- 1. NISSAN Genuine Emergency Tire Sealant bottle
- 2. Air compressor*

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



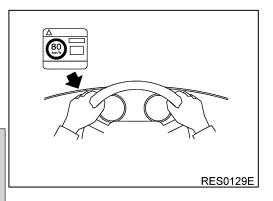
4 - 8 - 1 : Before Using Emergency Tire Puncture Repair Kit

- 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.

- 4 8 2 : Kit Repairing the Tire
 - Take out the speed restriction sticker from the air compressor*, then put it in a location where the driver can see it while driving

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

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

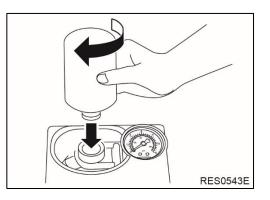


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2. Take the hose (1) and power plug (2) out of the air compressor. Remove the cap of the bottle holder from the air compressor.

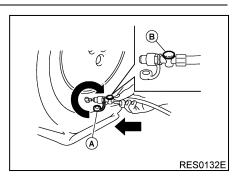
 Remove the cap from the tire sealant bottle and screw the bottle clockwise onto the bottle holder. Leave the bottle seal intact. Screwing the bottle onto the bottle holder will pierce the seal of the bottle.



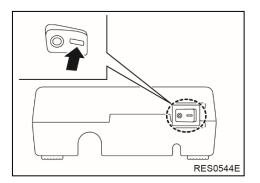
4. Remove the cap from the tire valve on the flat tire.

Roadside Assistance

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



- 6. 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.



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.

Do not operate the compressor for more than 10 minutes.

AWARNING

- 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.

Roadside Assistance

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 ARIYA 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.

AWARNING

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 ARIYA dealer. The sealant bottle and hose cannot be reused to repair another punctured tire. It is recommended you contact a NISSAN certified ARIYA dealer to purchase replacements.

4 - 8 - 1 : After Repairing the Tire

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

AWARNING

- 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 ARIYA 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 ARIYA 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.

5. Storing the Vehicle

The service plug must be removed to shut down the high voltage system for storage. Do not store a vehicle inside a structure if the Li-ion battery is severely damaged. Also keep the enough distance from other vehicles and surrounding structures. There is possibility of delayed fire from a severely damaged Li-ion battery.

5 - 1 : Danger Sign Example

If ARIYA needs to be stored or left unattended, the high voltage system must be shut down by removing the service plug (refer to 5-3 Removing the Service Plug), and a sign put on the vehicle indicating it is an electric vehicle with high voltage dangers. For example:



Storing the Vehicle

5 - 2 : PREPARATION ITEMS

	Specification	Purpose	
PPE (personal	 Use protective gloves made of 		
protective equipment):	insulating material.		
Insulated gloves	 The protective gloves must be 		
\sum	capable of resisting the voltage of		
<i>W</i>	600 V or more.		
	 Use protective shoes made of 		
Insulated shoes	insulating material.	For protection from high voltage	
	 The protective shoes must be 	electrical shock	
	capable of resisting the voltage of		
	600 V or more.		
Face shield/Safety			
glasses	_		
Wrenches		To remove the service plug access	
	Size: 10 mm	cover bolts. To remove the 12V	
7		battery terminal bolt.	
Solvent resistant	<u>_</u>		
protection gloves		To utilize in the event of a Li-ion	
Solvent resistant	-	battery electrolytic solution leak.	
protection shoes			
	The same pad used for internal	To absorb any Li-ion battery electrolytic solution leakage.	
•	combustion engine fluids can be		
	used.		
	Standard fire fighting equipment		
•••	Depending on type of fire (vehicle or battery) use standard fire fighting	To extinguish a fire.	
	equipment (water or extinguisher).		
		To cover any damaged harnesses	
		to protect from and prevent	
Insulated tape	Insulating	electrical shock. Tape should	
		cover all bare or damaged wire.	

5 - 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.

5 - 2 - 2 : Daily Inspection

This inspection is performed before and after use. The worker 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)

5 - 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.

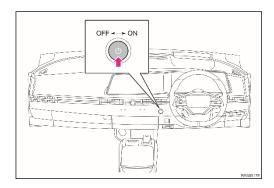
5 - 3 : REMOVING THE SERVICE PLUG

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.
- A Immediately cover the service plug socket with insulated tape. The Li-ion battery retains high voltage power even when the service plug is removed. To avoid electric shock, DO NOT touch the terminals inside the socket.

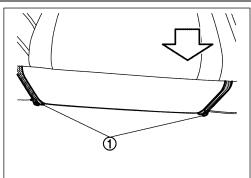
To avoid unintended reinstallation and risk of electrical shock and severe personal injury or death, the service plug should be securely stored away from the vehicle while the vehicle is in storage.

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

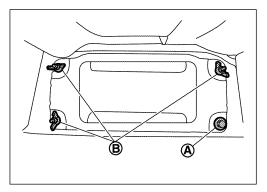


4. Open the zipper (1) on the rear seat cushion.

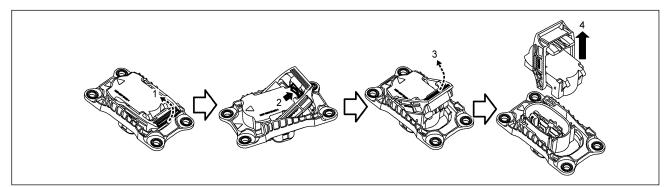




5. Remove the service plug terminal cover mounting bolts (A) and nuts (B), and remove the service plug terminal cover.



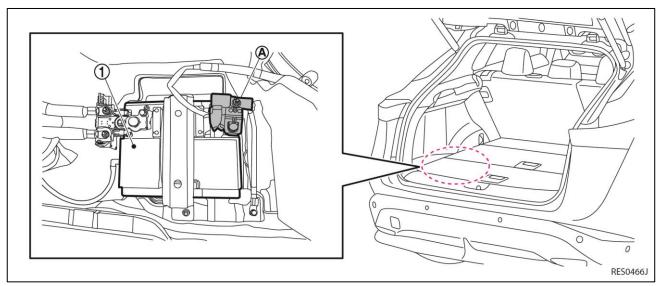
6. Remove service plug as per the following steps:



- 1. Push up lever until the stops.
- 2. Press pawl to unlock.
- 3. Push up lever.
- 4. Pull out service plug.
 - 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 trunk.

Storing the Vehicle

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



10. The vehicle is now ready for storage.