

# 2018 e-NV200

Roadside Assistance Guide





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#### **Foreword**

This manual describes roadside assistance operations and related warnings and cautions for this vehicle.

This vehicle is an electrically driven vehicle equipped with a high voltage battery pack. Failure to follow recommended practices during emergency responses may 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 in which this vehicle is involved. Follow the procedures in order to help assure a safe and successful **roadside assistance** operation.

This manual is periodically updated. If you are not sure you are viewing the most recent version of this manual, we urge you to contact Nissan Customer Service.

# IMPORTANT INFORMATION ABOUT THIS MANUAL

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



#### **A** DANGER

This symbol is used to inform you of an operation which may cause 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.

# **A WARNING**

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

# **A** CAUTION

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 the specifications described in this manual and the actual vehicle specification due to specification changes.

# 1. About the NISSAN e-NV200

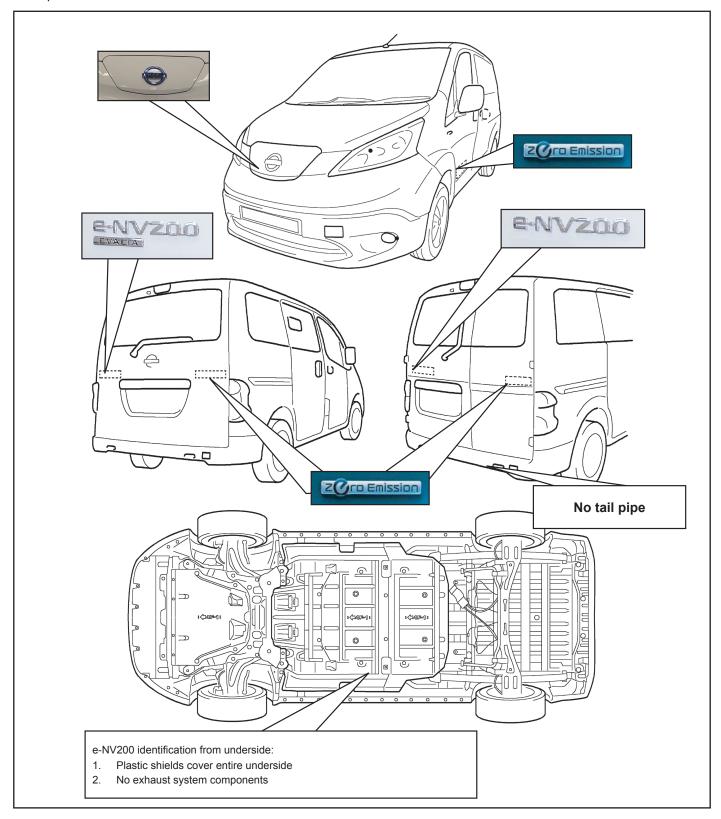
This vehicle uses two types of batteries. One is a 12V battery that is of the same type as the battery in vehicles powered by internal combustion engines. The other one is the (high-voltage) Lithium-ion (Li-ion) battery that delivers the electrical power for the traction motor that propels the vehicle. 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 while being driven downhill. This is referred to as 'regenerative charging'. This vehicle is considered to be an environmentally friendly vehicle because it does not emit any exhaust gases.

# 1.1. e-NV200 Identification

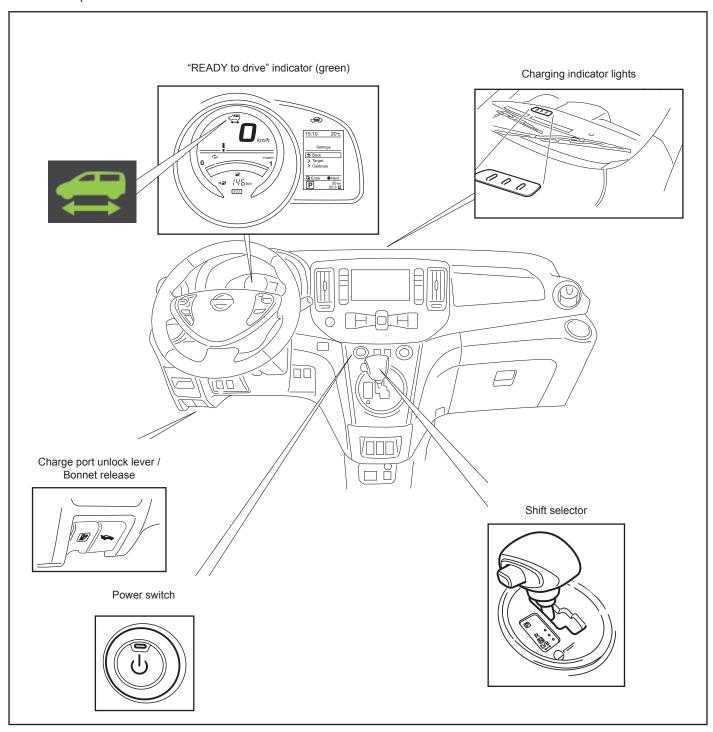
# 1.1.1. Exterior

The specific exterior identification features are shown below.



# 1.1.2. Interior Component Location

Interior components referenced in this manual are as follows:

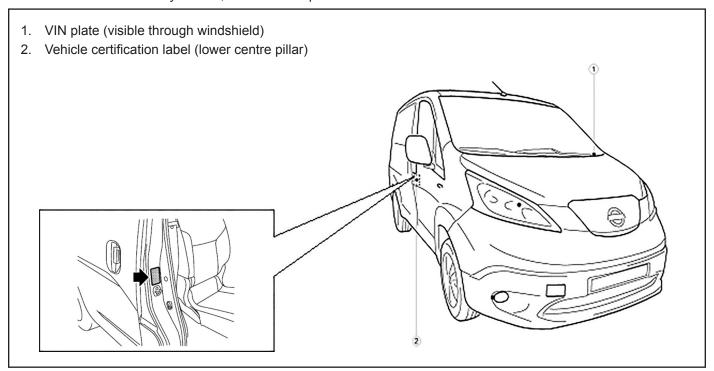


# 1.2. Vehicle Identification Number (VIN) Layout

The vehicle identification number can be located as follows:

Example VIN: VSKYAAME0U0123456

The e-NV200 is identified by the 7th, 8th and 9th alphanumeric characters: ME0.



# 1.3. Warning and Indicator Light Information

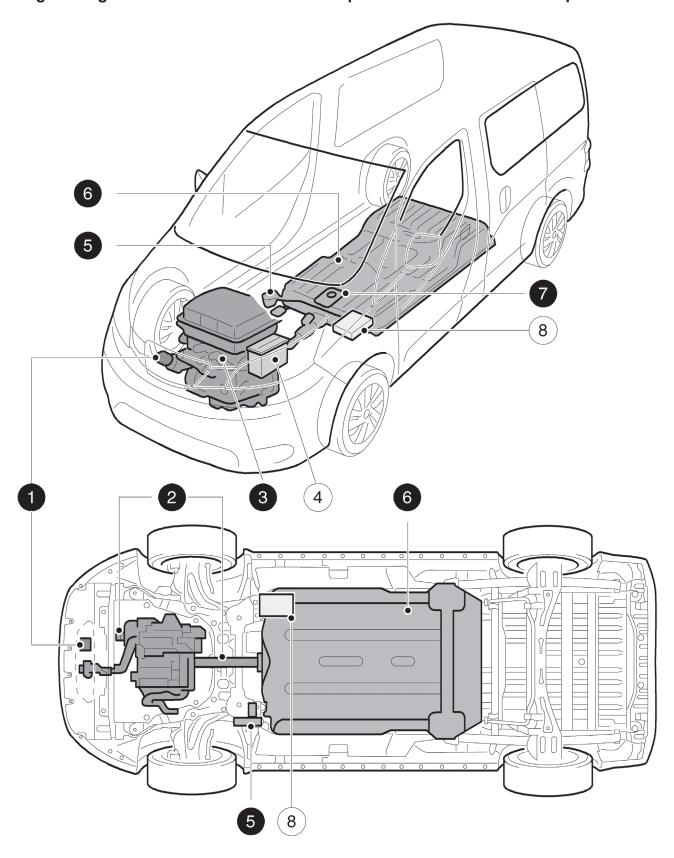
The following warning and indicator lights are located in the instrument cluster.

Light Name	lcon	Description
READY to drive indicator		This light is on when the EV system is powered up and the vehicle is ready to drive.
EV System Warning Light *1	<b>⇔</b>	<ul> <li>Malfunction has occurred in the EV system and/or</li> <li>Emergency shut off system has been activated. The shut-off system activates in the following conditions:         <ul> <li>Front and side collisions in which the air bags are deployed.</li> <li>Certain rear collisions.</li> <li>Certain EV system malfunctions.</li> </ul> </li> </ul>

<sup>\*1:</sup> When this light is ON, the READY to drive indicator will turn OFF.

# 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.

No.	Component	Location	Description
1	Charge port	Under bonnet	Connecting port for EVSE (Electric Vehicle Supply Equipment). Two ports are available:
			Normal charge and quick charge (where fitted).
2	High voltage cables	Under bonnet and undercarriage	Orange-colored power cables carry high voltage current between each of the high voltage components.
	Traction motor	Under bonnet	Converts three-phase AC power to drive power (torque) which propels the vehicle.
	Traction motor inverter	Under bonnet	Converts the DC power stored in the Li-ion battery to three- phase AC power and controls motor torque (revolution) by regulating the motor current.
			It also converts three-phase AC power to DC power during regenerative braking.
	Electric air conditioner compressor	Under bonnet	Air conditioner compressor.
3	Power Distribution Module (PDM):	Under bonnet	The PDM includes an On Board Charger, DC/DC converter and high voltage junction box (J/B).
	<ul><li>On Board Charger</li><li>DC/DC Converter</li><li>High Voltage Junction Box</li></ul>		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 Li-ion battery.
	(J/B)		The DC/DC converter reduces the voltage of the Li-ion battery to provide power to the 12V battery in order to operate the vehicle's electric components (headlights, audio system, etc.).
			The J/B provides electric power from the Li-ion battery to all high voltage parts of the vehicle.
4	12V Battery	Under bonnet	A lead-acid battery that supplies power to the low voltage devices.
5	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.
6	Li-ion (Lithium ion) battery	Undercarriage	Stores and outputs DC power (Maximum voltage aprox. 400V) needed to propel the vehicle.
7	High voltage battery service disconnect	Centre console	Isolates the battery from the rest of the high voltage electrical system.
8	Brake power supply backup unit	Front seat floor (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 12V battery.

# 2.1.1. Li-ion Battery Pack Specifications

Li-ion battery voltage	360V Nominal (240V - 400V usable range)
Number of Li-ion battery modules in the	48
Li-ion battery dimensions	1578 x 1102 x 266 mm (62.1 x 43.4 x 10.5 in.)
Li-ion battery weight	263 - 290 kg (580 - 639 lbs)

# 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-coloured 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 provided with labelled WARNING label similar to the label shown below. All high voltage harnesses are coated in orange.

# 2.2.1. Warning Label



# WARNING / AVERTISSEMENT ACHTUNG / ADVERTENCIA / AVISO

# **HIGH VOLTAGE INSIDE**

• DO NOT remove these covers and/or connectors.

# **HOCHVOLTFÜHRENDE TEILE IM INNEREN**

Diese Abdeckungen bzw. Stecker nicht entfernen.

# **HAUTE TENSION À L'INTÉRIEUR**

NE PAS enlever ces couvercles et connecteurs.

# **Alta Voltagem no interior**

• Nunca remova esta cobertura e/ou conector.

# Alto voltaje en el interior

Nunca extraiga estas tapas y/o conectores.



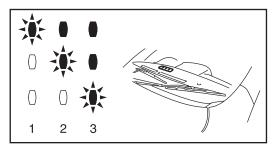
# 3. Roadside Assistance Response Steps

#### **A** WARNING

- A NEVER assume the e-NV200 is shut OFF simply because it is quiet.
- A 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 to drive indicator or charging indicator is ON, the high voltage system is active.
- A If possible, be sure to verify that the READY to drive 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.

# 3.1. Indications showing that the High Voltage System is ON

- If the READY to drive indicator is ON, the high voltage system is active.
- 2. The high voltage system is active if any charge indicator is ON (blue LED's on top of the instrument panel).



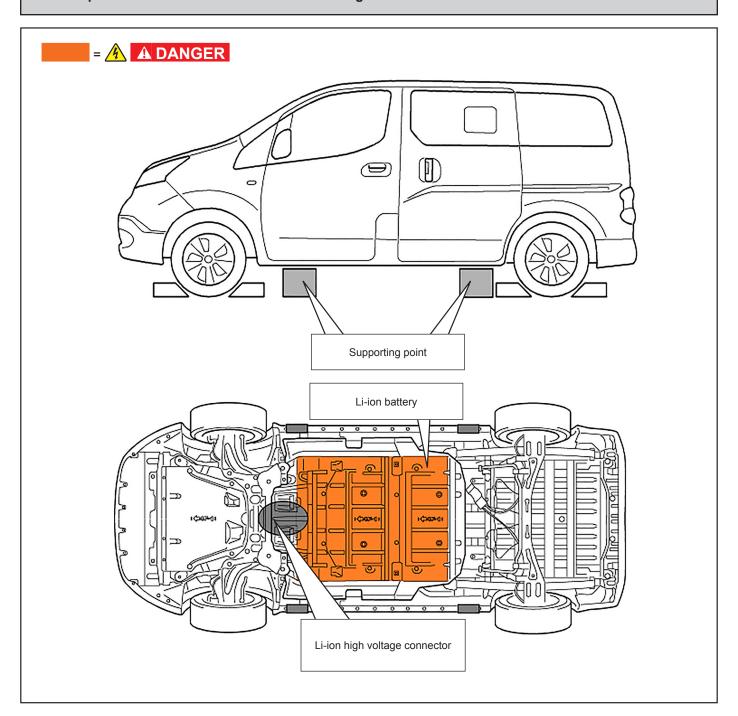
Before disconnecting the 12V battery terminal, if necessary, lower the windows, unlock the doors, and open the rear hatch as required. Once the 12V battery is disconnected, power controls will no longer operate.

# 3.2. Vehicle Immobilization and Stabilization

If possible, immobilize the vehicle by turning the 12V system OFF and stabilize it with wheel chock(s). Stabilize the vehicle with cribbing, by removing air from the tyres, or utilize the Lift Airbag Equipment for rescue.

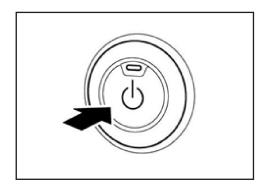
## **WARNING**

- Do not stabilize the vehicle with wooden blocks under the Li-ion battery.
- To avoid electrical shock, do not put wooden blocks or wheel chocks under the high voltage components and harnesses as shown following.

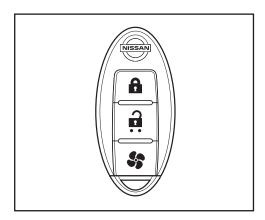


# 3.3. Turning OFF the Power Switch

- 1. Check the READY to drive 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 to drive indicator is OFF.



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



#### 3.4. Water Submersion

# **A WARNING**

- A The power switch of the submerged vehicle must be turned OFF first, if possible. Then the vehicle must be taken 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. Refer to 4.3. Towing.

#### 3.5. Vehicle Fire

## **A** WARNING

- Always utilize full Personal Protective Equipment (PPE) and a self-contained breathing apparatus during firefighting operations. Smoke from a e-NV200 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.

## **ACAUTION**

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 the 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

## **A** WARNING

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 Personal Protective Equipment (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 colour.
- · Sweet odour.
- · 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 (such as window washer fluid, brake fluid, coolant, etc.) 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.

#### **A WARNING**

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.

A 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 transmission cannot be shifted out of the (P) Park position normally.

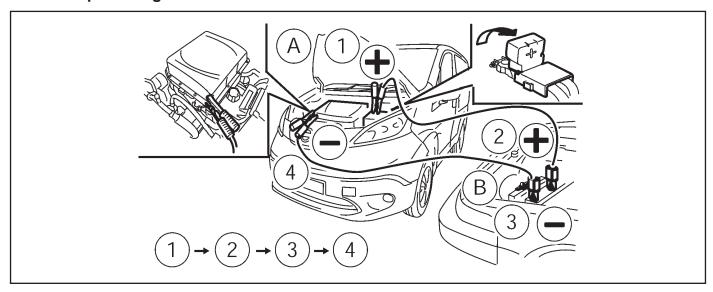
## **A WARNING**

- A 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.
- The e-NV200 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 DC/DC converter and cause personal injury.

#### **A** CAUTION

- Do not use the e-NV200 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 12V batteries in close proximity to each other.

DO NOT allow the two vehicles to touch.

- 2. Apply the parking brake.
- 3. Shift the shift selector into 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).

#### NOTE:

If the 12V 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.

- 6. Remove the vent caps on the 12V battery (if so equipped). 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  $(1\rightarrow2\rightarrow3\rightarrow4)$ .

#### **A** CAUTION

- 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.
- 8. Start the engine of the booster vehicle (B).
- 9. While the booster vehicle's (B) engine is running, turn the power switch ON while pressing the brake pedal in order to place the e-NV200 in READY to drive mode.

#### **ACAUTION**

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  $(4\rightarrow3\rightarrow2\rightarrow1)$ . Keep the EV system on for over twenty (20) minutes to charge the 12V battery.

- 11. Replace the vent caps (where fitted). Be sure to properly 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 (Electric Vehicle Supply Equipment) to charge the Li-ion battery. The vehicle cannot be driven unless the Li-ion battery is charged.

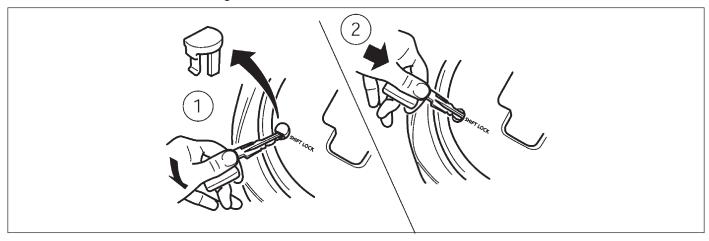
#### NOTE

If it is not possible to turn the e-NV200 system ON by following this procedure, contact a NISSAN certified EV dealer immediately.

# 4.2. P (Park) Position Release Procedure

If the 12V battery is discharged, it may not be possible to move the shift selector from the P (Park) position. Proceed as follows to release the vehicle from the P (Park) position.

- 1. Place the power switch in the OFF or LOCK position.
- 2. Confirm the parking brake is applied.
- 3. Remove the shift lock cover using a suitable tool.



- 4. Depress the shift lock release button.
- 5. Push and hold the shift selector button and move the shift selector to the N (Neutral) position while holding down the shift lock release button.

#### **A** WARNING

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

# 4.3. Towing

# 4.3.1. Vehicle Specifications

Length	4,560 mm (179.5 in)
Width	1,755 mm (69.1 in)
Overall Height	1,850 mm (72.8 in) *1 1,855 mm (73.0 in) *2
Wheel Base	2,725 mm (107.3 in)

<sup>\*1:</sup> Wagon models

# 4.3.2. Towing Guidelines

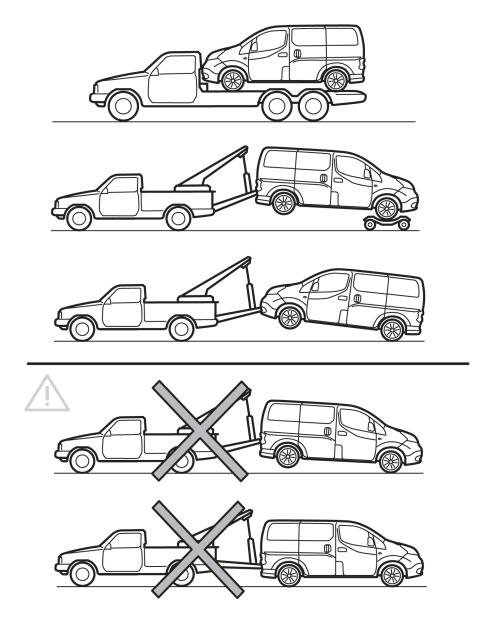
NISSAN strongly recommends that e-NV200 be towed with the driving (front) wheels off the ground or that the vehicle be placed on a flatbed truck.

#### **A 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 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.

<sup>\*2:</sup> Van models

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:

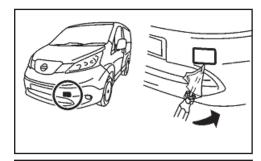


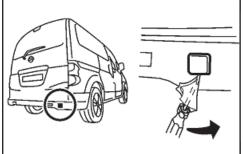
## **NOTES:**

- It is also permissible to transport the e-NV200 facing rearward on a flatbed.
- If the vehicle cannot be placed in Neutral, a P (Park) position release procedure may be required. Refer to 4.2. P (Park) Position Release Procedure.

# 4.3.3. Use of the Vehicle Equipped Hooks for Recovery Operations

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

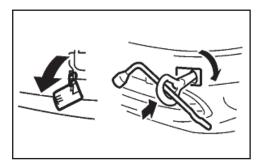




2. Securely install the recovery hook as illustrated. The recovery hook is located in the tool kit under the passengers seat.

# **AWARNING**

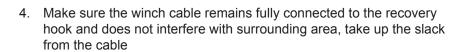
Failure to securely install the recovery hook may result in serious personal injury or death and/or vehicle damage.

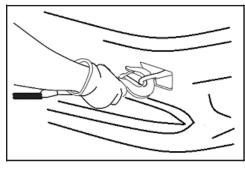


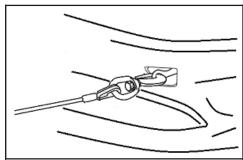
3. Attach the winch cable securely to the recovery hook.

# **AWARNING**

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







## 4. ROADSIDE ASSISTANCE

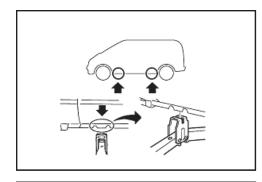
- 5. Release the parking brake.
- 6. Place the selector lever in the N (Neutral) position.
- 7. Carefully pull the vehicle onto the flatbed.
- 8. Be careful not to pull the vehicle too close to the winch. Doing so will cause excessive downward force being applied to the recovery hook. Too much downward 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.

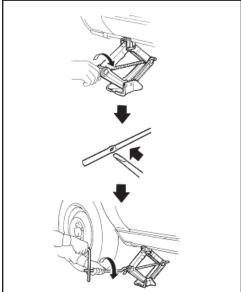
# 4.4. Jacking Up the Vehicle and Changing or Repairing a Tyre

The e-NV200 is either equipped with a spare tyre or a tyre puncture repair kit.

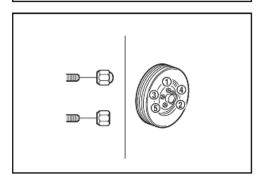
To jack up the vehicle proceed as follows:

- 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 and 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 tyre is off the ground.
- To lift the vehicle, securely hold the jack lever and rod with both hands as shown. Carefully raise the vehicle until the tyre clears the ground. Remove the wheel nuts, and then remove the wheel.



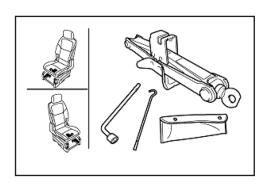


- 4. Install new or repaired tyre and hand-tighten the wheel nuts with the wheel nut wrench in an alternating pattern.
- 5. Securely torque the wheel nuts in an alternating pattern to 80 ft-lbs (108 Nm).



## 4.5. Tools and spare wheel

1. The tools and jack are located under the passenger seat.



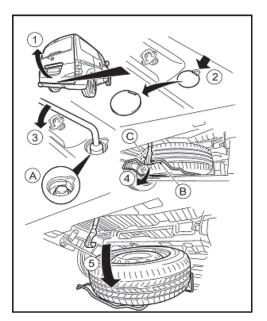
The spare wheel (where fitted) is located under the rear of the vehicle. To remove the spare wheel, proceed as follows:

- 1. Open the back door.
- 2. Loosen the bolt (A) anticlockwise approximately 40 turns using the wheel nut wrench to lower the spare wheel.
- 3. Stop turning the bolt when the wheel is lowered to the place where the tyre basket (B) can be removed from the hook (C).

#### NOTE:

do not loosen the bolt excessively; otherwise the basket may fall suddenly.

- 4. Hold the wheel basket and remove it from the hook by pushing the basket upward.
- 5. Lower the wheel basket slowly to the ground, and then take out the spare wheel.



# 4.6. Repairing a Flat Tyre with NISSAN Emergency Tyre Puncture Repair Kit

The e-NV200 is equipped with a tyre repair kit, the following procedure can be followed to temporarily repair the tyre in case of a minor tyre puncture.

# **WARNING**

- After using the Emergency Tyre Sealant to repair a minor tyre puncture, do not drive the vehicle at speeds faster than 50 MPH (80 km/h).
- Immediately after using the Emergency Tyre Sealant to repair a minor tyre puncture, take the vehicle to a NISSAN certified EV dealer to inspect, and repair or replace the tyre. The Emergency Tyre Sealant cannot permanently seal a punctured tyre. Continuous operation of the vehicle without a permanent tyre repair can lead to a crash.
- If you used the Emergency Tyre Sealant to repair a minor tyre puncture, a NISSAN certified EV dealer may also need to replace the TPMS sensor in addition to repairing or replacing the tyre.
- NISSAN recommends using only NISSAN Genuine Emergency Tyre Sealant provided with the vehicle. Other tyre sealants may damage the valve stem seal which can cause the tyre to lose air pressure.
- · Make sure the parking brake is applied.
- Turn the power switch OFF while using the Emergency Tyre Sealant to repair a flat tyre.
- 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 tyre 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 assistance.
  - Keep the repair compound out of the reach of children.
  - The emergency repair compound may cause a malfunction of the tyre pressure sensors and cause the low tyre pressure warning light to illuminate. Have the tyre pressure sensor replaced as soon as possible.

#### **A CAUTION**

- To avoid the Emergency Tyre Puncture Repair Kit from being damaged during storage or use:
  - Only use the Emergency Tyre Puncture Repair Kit on the e-NV200 vehicle. Do not use it on other vehicles.
  - Only use the kit to inflate the tyres of the e-NV200 and to check the vehicle's tyre 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 Tyre Puncture Repair Kit under the following conditions. Contact a NISSAN certified EV 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 tyre is approximately 0.25 in (6 mm) or longer.
  - when the tyre sidewall is damaged.
  - when the vehicle has been driven with extremely low tyre pressure.
  - when the tyre has come off the inside or the outside of the wheel.
  - when the wheel is damaged.
  - when two (2) or more tyres are flat.

Take the emergency tyre puncture repair kit out of the storage bag under the front passenger seat. The repair kit consists of the following items:

- 1. Tyre Sealant bottle
- Air compressor
- 3. Speed restriction sticker

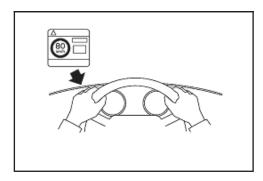
# 4.6.1. Before Using the Emergency Tyre Puncture Repair Kit

If any foreign object (for example, a screw or nail) is embedded in the tyre, 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.

1. Remove the speed restriction sticker from the compressor, then place it in a location where the driver can see it while driving.

#### A CAUTION

Do not put the speed restriction label on the speedometer or the warning light locations.



- 2. Take the hose and the power plug out of the air compressor. Remove the orange cap of the bottle holder from the air compressor.
- 3. Remove the cap of the tyre sealant bottle

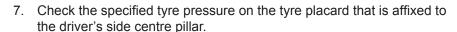
#### NOTE:

Leave the bottle seal intact. Screwing the bottle onto the bottle holder will pierce the seal of the bottle.

- 4. Screw the bottle clockwise onto the bottle holder of the air compressor.
- 5. Remove the cap of the tyre valve on the flat tyre.
- 6. Screw the air tube (A) of the compressor securely onto the tyre valve. Make sure that the air compressor switch is in the OFF position and the pressure release vale (B) is securely closed. Then insert its power plug into the 12V power outlet at the centre console.

# **A** CAUTION

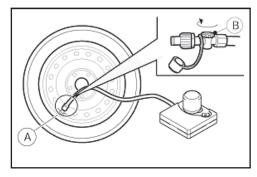
An incomplete connection between the hose and tyre valve causes air leakage or sealant scatter.

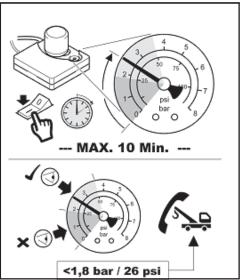


8. Place the power switch in the ACC position. Then turn the compressor switch to the ON position. Make sure the pressure release valve is closed, then inflate the tyre up to the specified pressure.

#### A CAUTION

- Do not operate the compressor for more than 10 minutes.
- Do not stand directly beside the damaged tyre while it is behind inflated because of the risk of rupture. If there are any cracks or bumps, turn the compressor off immediately.





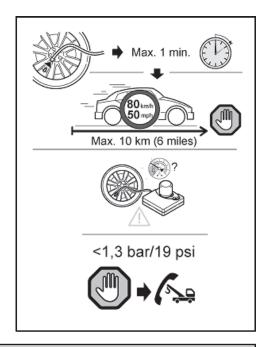
- 9. Turn the air compressor off, then remove the air tube.
- Within 1 minute after following step 9, drive the vehicle for 10 km (6 miles), or 10 minutes (if the road situation allows it) at a speed of 80 km/h (50 MPH) or less.
- 11. After driving 10 km (6 miles), or 10 minutes, screw the air tube of the air compressor securely onto the tyre valve to check the tyre pressure with the pressure gauge.

The temporary repair is completed if the tyre pressure does not drop.

#### NOTE

If the tyre pressure is lower than as specified, repeat the steps from step 8.

If the pressure drops again, or is under 130 kPa (1,3 bar; 19 psi), the tyre cannot be repaired with this tyre repair kit. Contact a certified NISSAN certified EV dealer.



#### **A WARNING**

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

# 5. Storing the Vehicle

## **A** CAUTION

- 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 Li-ion battery is severely damaged. There is possibility of delayed fire from a severely damaged Li-ion battery.

# 5.1. Danger Sign Example

If the e-NV200 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. An example of such a sign is shown on the next page.

Person in charge:
DO NOT TOUCH!
PROGRESS
<b>NI AIA93A 30ATJOV HOIH</b>
:A35NAG
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

# 5.2. Preparation Items

Preparation Items	Specification	Purpose	
Personal Protective Equipment (PPE)	Up to 1000V		
Insulated gloves:	Removing and installing high voltage components comply with EN60903:  Use protective gloves made of insulating material.  The protective gloves must be capable of resisting the voltage of 1000V or more.		
Insulated shoes:	Removing and installing high voltage components comply with EN60903:  Use insulated shoes made of insulating material.  The insulated shoes must be capable of resisting the voltage of 1000V or more.	For protection from high voltage electrical shock.	
Safety shield/safety glasses:	Removing and installing high voltage components comply with EN166:  To protect face from the spatter, when working on the electric line.		
Wrenches	Size:10mm	To remove the service plug access cover bolts.  To remove the 12V battery terminal bolt.	
Solvent resistant protection gloves	-	To utilize in the event of a Li-ion	
Solvent resistant protection shoes	-	battery electrolytic solution leak.	
Absorbent pad	The same pad used for internal combustion engine fluids can be used.	To absorb any Li-ion battery electrolytic solution leakage.	
Standard firefighting equipment	Depending on type of fire (vehicle or battery) use standard firefighting equipment.	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.	

# 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 1000V/300A specifications.

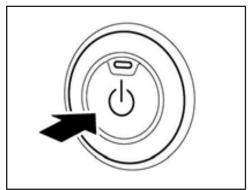
# 5.3. Removing the Service Plug

# A DANGER

- ⚠ Do not remove the service plug without always wearing appropriate Personal Protective Equipment (PPE) to help protect you 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.

# **Primary Procedure**

- 1. Check the READY to drive indicator status. If it is ON, the high voltage system is active.
- 2. Move 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 to drive indicator is OFF.



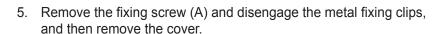
4. Disengage the fixing pawls of the access trim cover located on the floor behind the centre console. Pry up and remove.







Arrow in illustration depicts vehicle front direction.

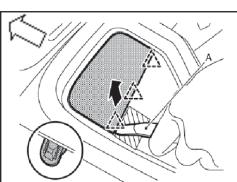


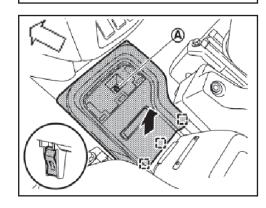


#### NOTE:



Arrow in illustration depicts vehicle front direction.



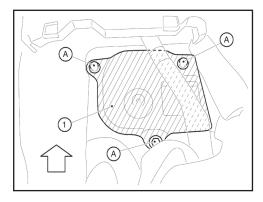


6. Remove the access cover bolts (A) and remove the cover (1)

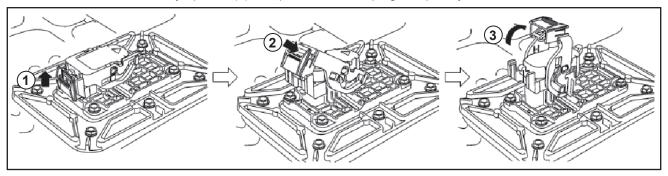
#### NOTE:



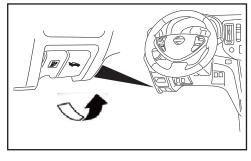
Arrow in illustration depicts vehicle front direction.



7. 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) and pull the service plug completely out of its socket.



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



10. Disconnect the negative (-) 12V battery cable (1). Insulate the negative (-) battery cable terminal with Insulating tape.

#### NOTE:



Arrow in illustration depicts vehicle front direction.

11. The vehicle is now ready for storage.



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