

Road Transport Quality Manual

NISSAN GROUP OF NORTH AMERICA



**NNA SUPPLY CHAIN MANAGEMENT
FINISHED VEHICLE LOGISTICS**

Version 1, 2020

INTRODUCTION

This document is published by Nissan North America Inc. (NNA) Supply Chain Management Finished Vehicle Logistics Department. The manual contains procedures and requirements for all NNA Nissan and Infiniti models.

Quality plays a major role in overall opinion (OAO). Highest priority is given to customer opinion that requires the combination of all quality activities, including those related to finished vehicle logistics.


All procedures and requirements detailed in this manual for handling, loading, unloading and transport of NNA vehicles must be adhered to unless previously agreed upon in writing by NNA Supply Chain Management.


In addition to the instructions provided, transport personnel are to follow the procedures specified by their company at all times to prevent vehicle damage, and to ensure a safe and damage free delivery. Any conflict in those procedures and in this manual are to be brought to the attention of NNA Finished Vehicle Logistics Department or your WW Solutions representative for resolution.

It is the intent that all transport personnel handling NNA vehicles to be fully aware and trained to the details in this manual, including referenced supporting documents. All Road Transport providers, including temporary contracted personnel, are required to have access to this manual and operators can demonstrate compliance to these standards.

NNA or designated parties reserve the right to deny hauling privileges for Nissan &/or Infiniti vehicles to any parties that are not following the procedures outlined in this manual.

Key:

 - Additional content compared to previous version.

 - Change or deletion compared to previous version.

Printed Versions are Uncontrolled

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Section 1: Transporting New Vehicles

A. General Handling Instructions

Road transport providers are extensions of the Nissan North America Inc. (NNA) network and must conduct themselves in a professional manner when interacting with customers. Examples of logistic customers are Nissan or Infiniti employees, dealership personnel and vehicle processing center (VPC) employees.

Personnel driving any Nissan or Infiniti vehicle must have a valid driving license. Validity of driving license must be checked regularly (at least once a year) by carrier management.

All personnel handling NNA vehicles must have training to the procedures outlined in this manual. NNA or designated parties reserve the right to deny hauling privileges for Nissan/Infiniti vehicles to any parties that are not following the procedures outlined in this manual. NNA or designated parties have the right to audit driver and secured loads for compliance to the standard.

A Broker or carrier company that contracts work to sub-haulers must provide drivers with the NNA quality standards, verify they have a valid license & verify their equipment meets shipping standards. Communication must also include Risk Prevention and Safety protocols outlined in the next section. The company that contracts with sub-haulers is responsible for their damages and safety.

New vehicles movement is limited for the purpose of loading/unloading or an approved activity and not as a shuttle vehicle.

i. **Moving Vehicles (Do's & Don'ts)**

- Do not eat, drink or smoke – Loading area is a smoke-free zone
- Do not lean on, climb on or relax inside vehicle
- Do only exit through driver's door
- Do not drive a vehicle with the battery cable loose to the post
- Do not drive on a flat tire
- Do not allow the engine to idle when not in use
- Do not spin the drive wheels, slip the clutch, or drive aggressively
- Do not rev the engine after starting and before turning off vehicle
- Do open the door with care to ensure the door will not contact any person or object

ii. Winter Weather Handling

Carrier driver must ensure adequate visibility before driving the vehicle. If a vehicle is covered with snow, remove it carefully. At NO time should anything be used that could scratch the glass or damage the paint during snow or ice removal.

- ❌ Do not move a vehicle with windows covered with snow or ice.
- ❌ Do not use wipers to clean snow/ice covered glass.

Letting the engine run to defrost windows is permitted only for the time needed to safely operate the vehicle. If a vehicle runs out of gas, contact rail management or WWS to refuel.



B. Special Handling of Vehicle Components

Improper handling of certain vehicle functions may cause damage.

i. Wiper Operation

Always activate the washer fluid prior to starting the wiper blades in accordance with [Wiper Operation Bulletin SCM 14/01B](#).

ii. Side Mirror Operation

NNA vehicles are equipped with 3 types of side mirrors:

- Non-folding
- Manual fold
- Electric fold

Electric mirrors must be open/closed using the electric power switch. Any manual movement of electric mirrors can cause damage.

C. No Start & Disabled Vehicles

Contact your load supervisor or WWS to get a replacement vehicle. If pickup is after hours, the vehicle must be left behind.

It is prohibited to load under these conditions:

i. General

- If vehicle has a strange noise, odor, or the engine warning lamp is illuminated, immediately turn off vehicle & contact yard management for further direction

ii. Tire Warning Lamp

- Start the vehicle and LOOK. If the TPMS light is on something is wrong with tire pressure



- If you Suspect, Inspect!
- Do not load or drive a vehicle with a flat tire or low tire pressure as rim damage may occur. Car carrier company and/or driver will be held liable for flat tire and/or rim damage delivered to dealer

iii. Out of Fuel

- NNA manufactures both Gasoline and Diesel models. If unit needs fuel, confirm fuel type found inside the fuel door lid &/or on fuel cap
- **CAUTION!** Do not leave the fuel door open or fuel cap off for any reason
- Titan Gasoline & Diesel Difference



iv. Battery

To insure good battery operating life the WWL VPCs disconnect the negative battery cable and reconnect when assigned to a carrier load. In the event that a vehicle is found with the battery disconnected, contact WW Solutions VPC.

It is **prohibited** for loading personnel to place the battery cable on the post without securement before moving a vehicle. Driving with a loose battery cable may cause vehicle malfunction & “check engine” light to stay on.

- **CAUTION!** Electronic failure can disable the vehicle if driven in this condition. Battery cable must be tightened to the post prior to vehicle movement.

It is prohibited to jump-start a discharged battery and then load the vehicle. Vehicle must have battery recharged or replaced. Contact yard personnel or dispatch for a replacement vehicle.

v. Battery Transport Mode

Many Nissan and Infiniti units are/will be equipped with battery saver features including Shipping Fuse and Transit Mode. This feature disables some functions that are associated with battery “dark current” draw when a unit is not in operation.

Transit Mode will not affect transit operation of the vehicle but you may notice:

- Blower motor stuck in the ON position or radio display on while engine is on
 - Adjusting the knobs will not change this setting as it is a normal function to remind dealer prior to delivery to customer
- Turn signals may stay on solid for 1 minute when IGN is placed in ON position
- Key fob remote door &/or trunk opening feature will not work if the engine is not running

These are all normal conditions and no attempts should be made to seek repairs-

D. Risk Prevention & Safety

NNA counts on all logistic partners to support and comply with NNA’s safety and damage prevention policies. We rely on your commitment to safety and quality handling of NNA vehicles for a damage free delivery that leads to a perfect dealer handover.

The following applies to all employees working around or driving NNA vehicles:

i. Safety Gear & Guidelines

- High visibility vest or clothing is required
- For visibility and safety reasons, wearing hoods up is not allowed
- Drivers must respect speed limits, signs and floor markings
 - If no posted speed limit, maximum speed authorized is 25mph
- Honk vehicle horn before backing out of parking spot
- Maintain sufficient safe distance to vehicle in front, keeping a minimum of 2 second spacing
- Do not travel in opposite direction of signage

ii. Anti-Mutilation Policy

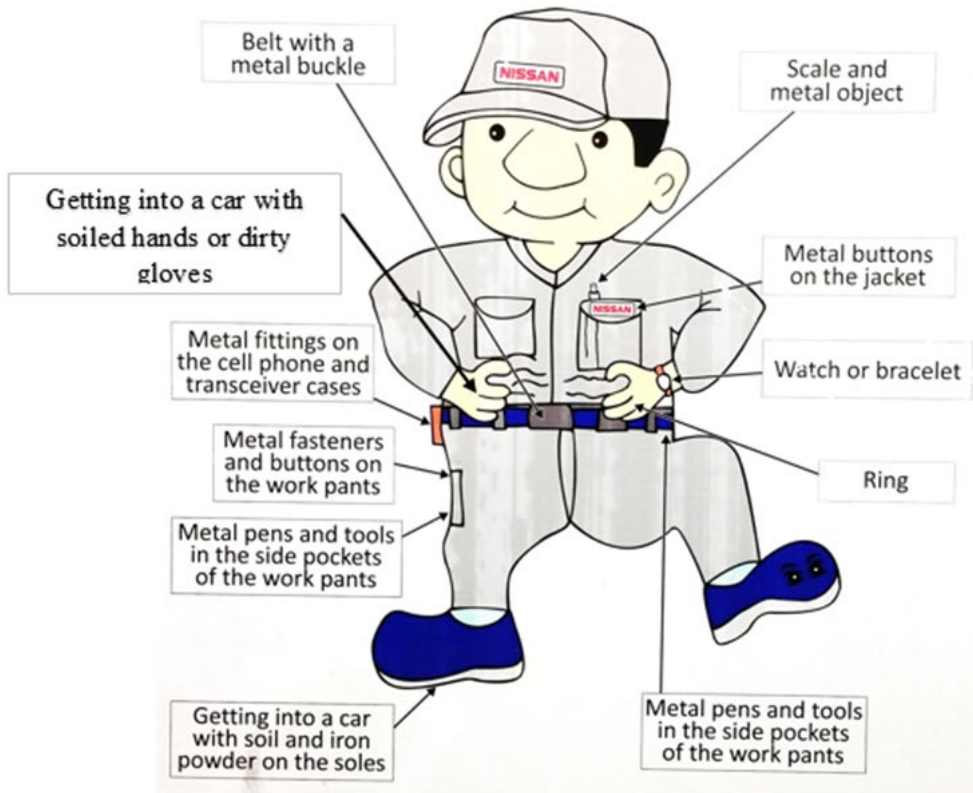
NNA vehicles come equipped with various protection on vehicle components during the logistic process. NNA requests that you support this policy by not removing factory-installed vehicle protection and put seat cover back in place as needed.

Be respectful of your loading areas. Debris, straps, oil etc. can cause damages to interior components and/or flat tires. Take all items you no longer need or use trash cans provided for small debris. Drivers & their companies are responsible for vehicle damage while the vehicle is in your possession. All vehicle handlers must adhere to the following standards:

- ✓ Clean hands or gloves when inside the vehicle.
- ✓ Working gloves should be worn when operating or handling loading/unloading equipment
- ✓ Always reposition driver's seat and floor coverage
- ✓ Watches and rings can only be worn if covered
 - Watches include traditional watches, smart watches, & exercise tracking devices (Fitbit, etc.)
- ✗ Exposed metal belt buckles is prohibited
- ✗ Exposed zippers and rivets are prohibited
- ✗ No drinks allowed inside the vehicle
- ✗ Providers must wear clean working clothes (no oil/grease stains)
- ✗ Carrying objects on person is prohibited, this includes but not limited to:
 - Cell phone in pocket or holster, sharp objects in pocket, pencils, keys, etc.
 - Keep tools from contacting vehicle and keep all objects off vehicle surfaces
- ✗ No pens or paint markers can be used in or around vehicles



Nissan **PROHIBITS** the Following:



iii. Cell Phone Policy

Use of cell phones, hands-free/blue tooth devices or ear buds is prohibited when actively setting up equipment, loading, unloading & driving vehicles.

Section 2: Transfer of Responsibility

A. Vehicle Inspection

At every handover, a vehicle inspection must be conducted to detect damages or shortages. All exceptions for damages and missing loose content must be reported to the following:

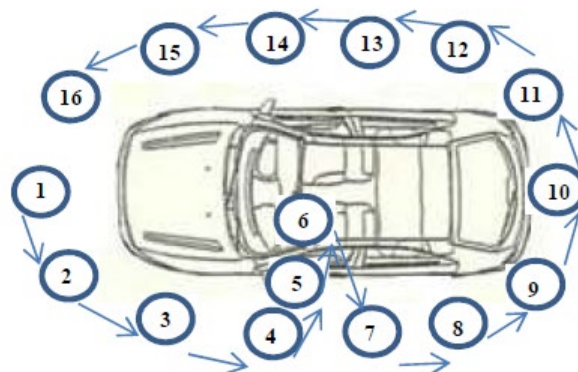
- WWS for vehicles at the VPC or their unmanned storage locations
- Rail companies for vehicles at rail ramp locations
 - Each ramp may have different reporting methods. Follow site instructions.

Transfer of responsibility occurs the moment carrier personnel moves the vehicle. Prior to moving the vehicle from location, the following checks must take place for driver to be cleared of any handling damages:

i. **Carrier Inspection Process**

- Validate the VIN matches Load Sheet using VIN plate located on driver's doorjamb or driver dash plate.
 - Do not move a vehicle if the VIN does not match exactly.
 - Do not use the Monroney or any paperwork inside the vehicle.
- Verify Monroney is on the window and matches the VIN plate.
- Prior to moving vehicle from bay perform a thorough inspection and report damages or missing items. See **B. Exception Reporting**
- Exterior Inspection: Do a complete walk-around assessment of the vehicle's exterior & visible areas. See **B. Exception Reporting** to report any damages found
- Use a standing position of 3 feet away from the vehicle of a complete walk-around assessment.
- Include visible undercarriage components such as: exhaust tips, lower portion of the front and rear fascia, wheels and tires.

BEST PRACTICE: Develop an inspection routine and follow this routine on every vehicle, every time. Below is an example:



ii. **Overnight Parking**

Selection of an appropriate parking location is an important factor in preserving the paint condition of vehicles during the delivery process. To minimize susceptibility to damage, drivers should take care not to park their truck under trees or near sources of metallic, organic, or petroleum fallout areas.

When parking overnight it is recommended to remove the keys and lock the doors.

iii. Vehicle Protection

The carrier driver must not remove the protection installed by the factory, if PGF is in good condition

- If PGF is damaged due to impact, contact WW Solutions or Inspection Company; do not remove PGF until inspector arrives.
- OK to remove PGF if loose; see exception below:

Exception: Remove any loose exterior protection or wheel mask. Loose protection can slap against the paint when in transit and cause paint damage and/or road hazard.

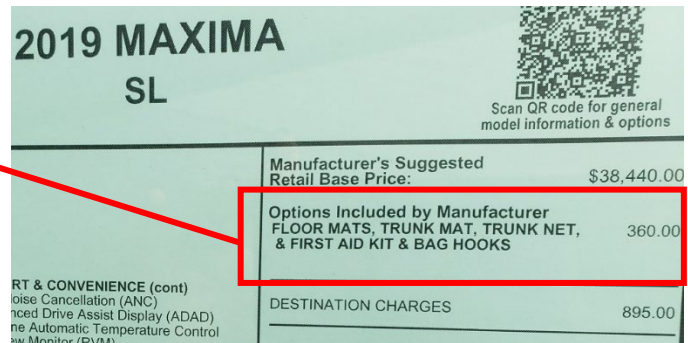
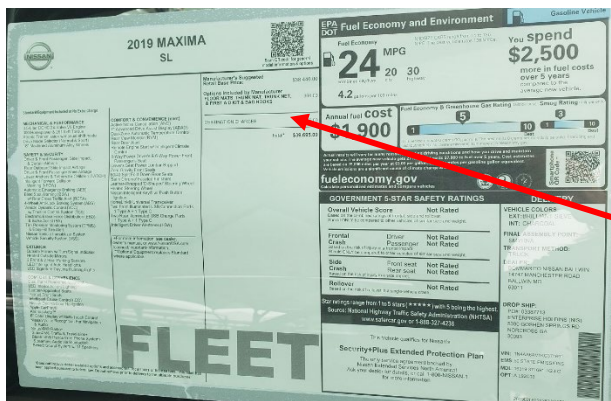


iv. Interior Inspection

If heavy soiling or any interior damages are found, document the issue on a damage exception report prior to moving the vehicle

v. Loose Content Inspection

- Loose items (i.e. floor mats) are listed on the right side of the Monroney.
- Not all loose content items will be listed on the right side of the Monroney(i.e. License plate bracket/Owners manuals/Wheel Center Caps)
- Verify loose content bag is sealed.
- Not all loose content is inside the sealed bag and can be found in the trunk (for cars and SUVs) & rear seat (for trucks).



Note: Nissan Key and Loose Content Guide is distributed to all Nissan Logistic providers. A copy can be obtained by contacting WWS.



vi. Loose Content – Keys

Each carrier driver is responsible for handling keys & validating key quantities. It is prohibited to separate keys. It is recommended to keep keys in the cup holder or center console. For overnight parking, it is recommended that all keys are removed from the vehicles, place loose content in the trunk and lock the doors.

All IKey and remote keys come in a set of **two** and will be listed in the Comfort and Convenience section of the Monroney. Some models may require a manual key, which is not listed on the Monroney; refer to the [Nissan Key and Loose Content Guide](#) for quantities and models.

Examples of IKey and Remote Key Styles:



Example of Manual Key Style:



B. Exception Reporting

If a vehicle is damaged, the VPC or yard inspector will decide if a vehicle can be loaded. Driver must receive a signed exception report from the VPC or yard management inspector PRIOR to moving vehicle. Exception form cannot be left in a vehicle.

Damages must be recorded, preferably electronic or using a dedicated sheet with signatures of the inspector and receiving party.

It is recommended that two (2) pictures be taken of each damaged area.

For additional new vehicle delivery standards, refer to the [APRM \(Alliance Product Resource Manual\)](#) updated annually and distributed by WWS.

Section 3: Road Transport

A. Truck Equipment

ALL VEHICLES WILL BE TRANSPORTED IN ACCORDANCE WITH ALL LOCAL, CITY, COUNTY, STATE AND FEDERAL LAWS, ORDINANCES AND REGULATIONS.

i. Carrier Truck Equipment

All car carrier equipment must allow various Nissan and Infiniti vehicles to be carried in a safe and secure manner. NNA, or any party acting on behalf of NNA, retains the right to prohibit the use of certain types of equipment which could potentially cause damage. Examples include but are not limited to:

- ✓ Age of equipment
- ✓ Amount of rust on equipment
- ✓ Inability to reach proper load angle for low profile vehicles with or without modifications.

It is the responsibility of each car carrier company or owner-operator to maintain truck equipment. Nissan assumes no responsibility for truck equipment that exposes Nissan and Infiniti vehicles to damage risk in any way. This includes but is not limited to:

- ✓ Deformed or rusted ramps/skids
- ✓ Leaking hydraulic lines
- ✓ Worn or frayed soft tie-down straps
- ✓ Bent/cracked/broken/leaking hydraulic components

It is the responsibility of each car carrier company to ensure the yard supervisor and/or loading personnel has a copy of this document and the most recent revisions of the [Truckaway Loading Matrix](#), [Dimensions Matrix](#) and [Nissan Key and Loose Content Guide](#). All carrier personnel must be trained on Soft Tie-Down methods.

A Broker or company that contracts work to sub-haulers must provide drivers with the NNA quality standards, verify they have a valid license and verify their equipment meets Nissan standards. The contracting company is responsible for sub-hauler damages.

ii. Hazardous Materials & Trash

All drivers must have basic **hazardous spill equipment** to clean up any spills (i.e. spills kits, absorbent material and container for cleanup etc.). Hazardous materials & tires cannot be disposed on site.

Note: Any truck that arrives with leaking hydraulic fluid may be charged an environmental clean-up fee and may be asked to leave the yard. Any person caught disposing materials on-site may be charged for disposal removal fees.



B. Tie Down Requirements

Model specific tie down requirements are released frequently and are communicated via email. It is the responsibility of each contracted carrier and their sub-haulers to ensure all drivers are issued a new copy the loading matrix.

Each car carrier must have the following basic equipment and use according to the standards below.

Note: Nissan reserves the right to approve alternate tie down securement methods.

i. **Soft-Tie Strap Configuration: 4 straps per vehicle**

- Strap is to be placed as close to the tire as possible
- Strap hook point cannot dig into tire
 - ✓ Soft ties are not allowed to contact any part of the vehicle
 - ✓ All loose or unused straps must be secured or stored
 - ✓ Do not over tighten wheel straps
 - Over tightening may lead to premature wear of the strap, damage to the vehicle or unexpected failure of the strap
 - Over tightening is applying more force than is necessary to adequately secure the vehicle and prevent movement
 - ✓ Additional straps must be available to replace any that are worn/frayed, per DOT regulations

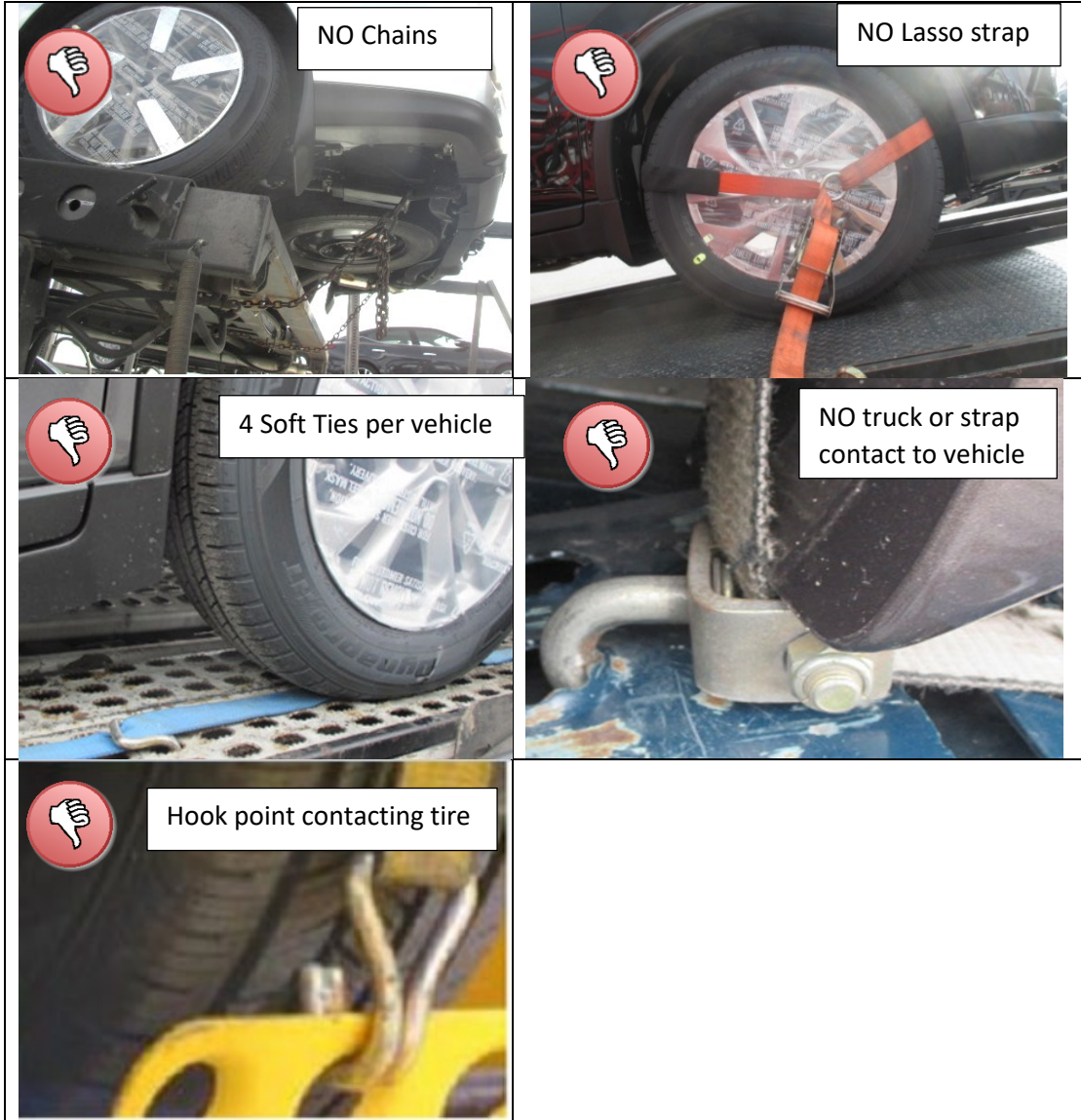
Approved Strapping Procedures:



PROHIBITIONS:

- ☒ Lasso strap and chain securement is prohibited. NNA frames no longer have reinforced frame attachment points. Carrier will be responsible for damages
- ☒ It is strictly forbidden to transport a vehicle by towing it with wheels on the ground

Prohibited Strapping Procedures:

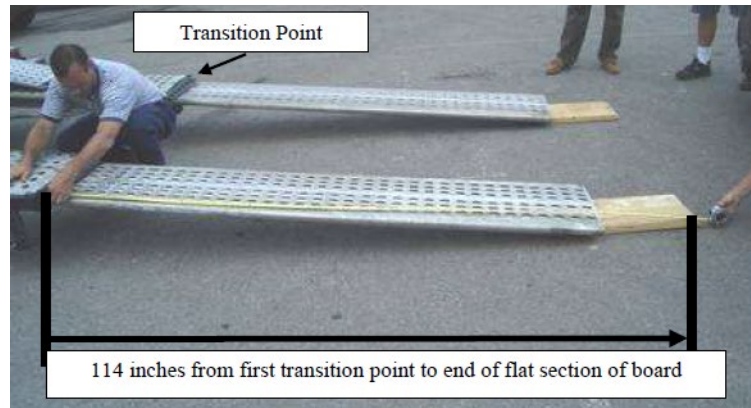


No applying plastic wrap guard (PGF) to windows, glass, mirrors. Unauthorized use of PGF is at your own risk.



Loading Equipment:

Additional equipment and/or riser boards may be required for some truck chassis designs to comply with the 4 degree drive-on angle to provide adequate clearance for low profile vehicles. The picture below is an *example* of one type of modification. Model specific provisions are found in [Nissan Truck Loading Matrix](#).



ii. Loading/Unloading & Lashing

- General Requirements:
 - ✓ Recommended to fold mirrors prior to loading
 - ✓ 4-wheel drive vehicles can only be loading in 2-wheel mode
 - ✓ Low profile cars must be driven on & off trailer at walking speeds
 - ✓ Close all doors, windows and sunroofs
 - ✓ Gear selection requirement for Automatic Transmission is Park & parking brake engaged.
 - ✓ Gear selection requirement for Manual transmission is 1st gear or Reverse, & parking brake engaged
 - ✓ All vehicles must be loaded under their own power
 - ✓ Ensure all vehicles are powered down with all lights off after loading
 - ✓ All 4 wheels must be secured with straps unless alternate methods are approved by Nissan
 - ✓ All strap ends and unused straps must be secured and stored
 - ✓ Strap hook end cannot dig into tire
 - ✓ Soft ties are not allowed to contact any part of the vehicle

- Minimum Clearances:
 - ✓ 4" minimum between top of vehicle and trailer
 - ✓ 3" minimum between bumper and sides to trailer
 - ✓ 2" minimum between vehicle undercarriage and trailer

- Tires:
 - ✓ Tire pressure cannot be adjusted
 - ✓ More than half the tire cannot overhang the platform
 - ✓ Do not drive or load a vehicle with a flat tire

- Deck angles:
 - ✓ Do not exceed 20 degrees from the horizontal during transport

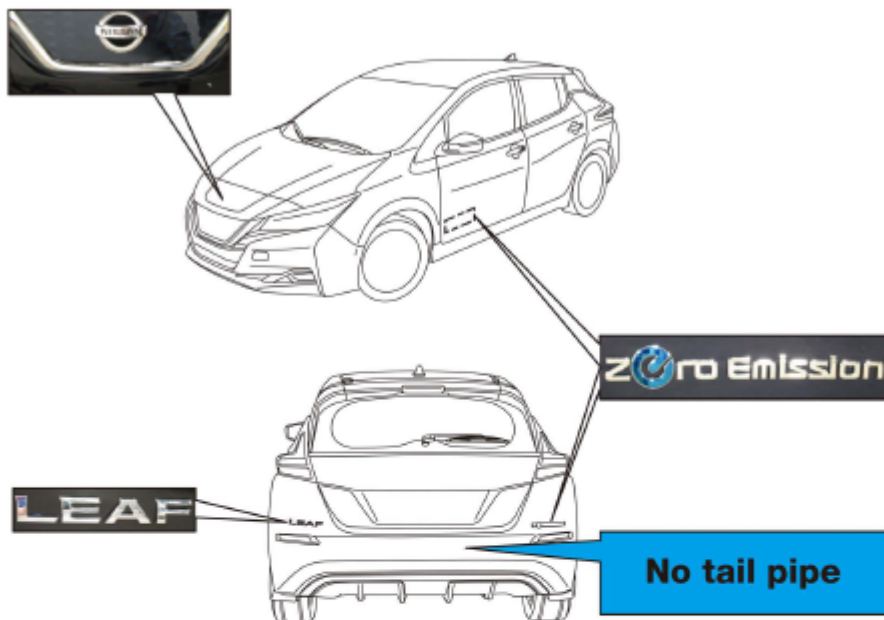
Section 4: Handling of Electric & Hybrid Electric Vehicles

Nissan's electric vehicle (EV) model is the Nissan Leaf. In addition to this manual, NNA publishes two (2) LEAF documents: [LEAF Roadside Assistant Guide](#), & [LEAF First Responder Guide](#). If you have not received a copy of these documents, please contact WWS or NNA Supply Chain.

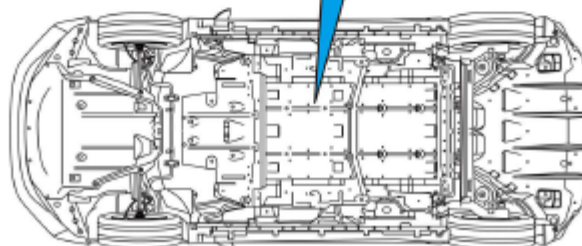
A. Nissan Leaf Electric Vehicle (EV)

i. Essentials of an Electric Vehicle (EV)

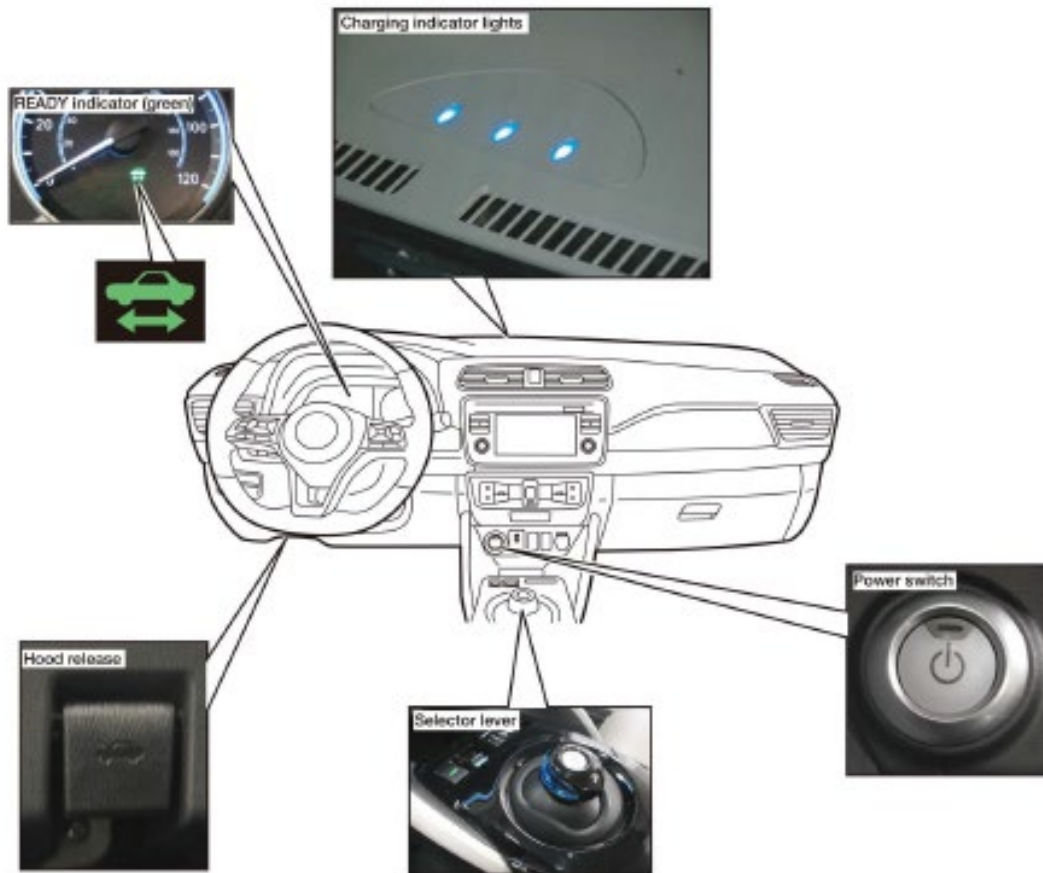
Exterior Identification:



LEAF identification from underside:
 1. Plastic shields cover entire underside.
 2. No exhaust system components.



Interior Identification:



ii. **Starting:**

READY Mode:

- Depress brake, press power on button. In ready mode, the indicator on the power button will turn white.
- Other visual identifiers that LEAF is in ready mode: Speedometer is illuminated in blue, green car appears on the display.

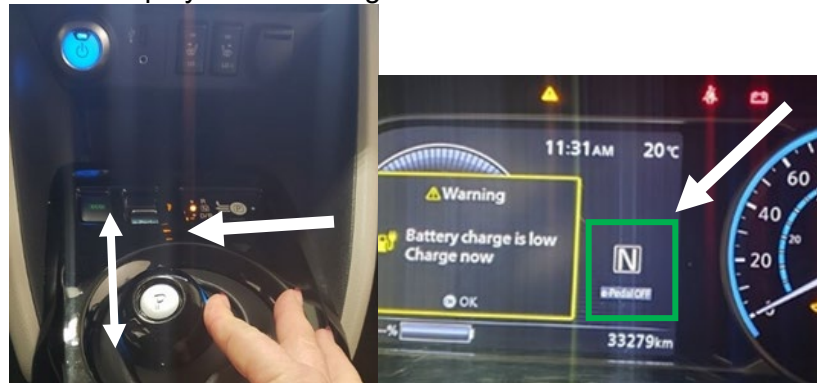


iii. Driving/ Parking

DRIVE Mode:

- Depress brake, move shifter to the left and then forward or backward for drive or reverse.

Note: When in doubt the display will indicate gear.



PARK Mode: Press the P in the center of the shifter.



Electronic PARKING BRAKE Mode:

- Depress brake, press down on parking brake switch for 3 seconds to release rear brakes.
- Visual Identifiers: Switch light on, parking brake on, switch light off, parking brake off.

Note: It is NOT recommended to use electronic parking brake mode. If there is a failure in the 12V system, the rear wheels will not move.





iv. 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. The READY  indicator will be OFF

ATTENTION: To prevent battery drain: STOP, LOOK, and LISTEN:

Note: Refer to [SCM 18/01B LEAF Battery Power Down Bulletin](#)

LEAF in OFF Mode	POWER OFF
Door Open – NO SOUND	
Visual: Speedometer is OFF Display shows 'Charging Time'	Power switch indicator lamp is OFF
	

v. No Start/Disabled EV

(Information in this section is also found in the [LEAF Roadside Assistance Guide](#))

- Flat Tire
 - ✓ LEAF does not have a spare tire. It is PROHIBITED to load a vehicle with a flat tire
 - ✓ Contact Yard Supervisor to get a replacement vehicle

- Discharged 12 Volt Battery or HV (high voltage)
 - ✓ **Note:** LEAF has an electronic shifter and electronic parking brake that will prevent front and rear wheel movement respectively.
 - ✓ It is prohibited to load a vehicle in this condition
 - ✓ Contact Yard Supervisor to get a replacement vehicle