Nissan Vehicle Handling Procedures

**Appendix A**: Jump Box Guidelines if Missing a 12 Volt Battery.

**Appendix B**: Pushing a Disabled Vehicle off a Railcar.

**Appendix C**: Jump Start a Hybrid 12 Volt Battery located in the Trunk.

**Appendix D**: Charging a Hybrid 12 Volt Battery located in the Trunk.

**NOTICE**: For Leaf EV 12 Volt Battery Jump Start Procedure or 12 Volt Battery Charge Procedure refer to Leaf Roadside Assistance Guide.
Appendix A:
Jump Start Guideline if Missing a 12 Volt Battery

Use this Guideline only if both battery cable ends are intact.

Notice:
- Rail Personnel can choose to follow this guideline to remove a disabled vehicle from a railcar or can report the condition to Fenkell Vehi-Trac for remediation.
- WARNING:
  - If one or both battery cables are cut or damaged use ‘Appendix B: ‘Pushing a Disabled Vehicle off a Railcar’.
  - For Leaf EV 12 volt battery jump start procedure refer to the ‘Leaf Roadside Assistance Guide’.
  - Cannot use this process for Hybrid models with a 12 Volt battery in the trunk. Refer to Appendix B to push disable unit off railcar.

Tools:
- Full Size Standard Jump Box

1. Fully lift hood and secure hood prop, as needed.
2. Place jump box on battery tray and attach jump box cables directly to vehicle battery cable ends.
3. Connect jump box in the order below:
   a. Positive (+) jumper cable to positive battery cable end.
   b. Negative (-) jumper cable to negative battery cable end.

CAUTION:
- Always connect positive (+) to positive and negative (-) to negative as shown or damage to battery or person can occur.
- Ensure positive (+) connection does not touch ground. Wrap connection with a rag as needed to protect from accidental contact.
- Make sure jumper cables do not touch moving parts in engine compartment.
4. Start vehicle. If engine is running, close hood until 1st latch hooks. Do not close hood completely. If engine does not start, notify Fenkell Vehi-Trac or use Appendix B: ‘Pushing a Disabled Vehicle off a Railcar’.
5. Drive unit SLOWLY off railcar and park immediately.
6. Remove jump box cables from engine compartment in order:
   a. Remove negative (-) jumper cable.
   b. Remove positive (+) jumper cable.
7. Notify Fenkell Vehi-Trac to get battery replaced.
Appendix B:  
Pushing a Disabled Vehicle off a Railcar

Reminder: Check the fuel level and add fuel before contacting WWL on crank no start vehicles.

To reduce potential damage, notify Fenkell Vehi-Trac to remove disabled units from a railcar with missing manual keys or locked doors.

Notice: Rail Personnel can choose to follow this guideline to remove a disabled vehicle from a railcar or can report the condition to Fenkell Vehi-Trac or WWL for remediation. Use the ‘Nissan Condition Matrix’ for direction.

WARNING:
- For Leaf EV Shift Lock and Parking Brake Release Procedure refer to Leaf Roadside Assistance Guide.

Tools:
- Small Flat Head Screwdriver

1. On manual key units, insert key and turn to the ‘on’ position. Confirm release of the steering lock by turning the steering wheel to the full left or full right position.
   
   Note: Remote keys/Push start vehicles do not have a steering lock.

   a. To the left or right of an automatic shifter there will be a small cover. Some units will have ‘shift lock’ notated by the cover.
   
   b. Using a small screwdriver gently remove cap. Take caution not to damage cover or console.
   
   c. Insert screwdriver into slot and push down. At the same time move shifter to Neutral (‘N’).

2. Place vehicle in neutral.

3. With steering lock released and vehicle in neutral, vehicle can be pushed off railcar.

   CAUTION: Steering and Brakes will have no power assist and will take extra effort and slower response when turning the steering wheel and when applying the brakes.
4. Move shifter to Park, remove key from ignition and place in cup holder. Engage parking brake and ensure shift lock cap is securely in place.
Appendix C:
Jump Start a Hybrid 12 Volt Battery located in the Trunk

WARNING:
- For Leaf EV 12 Volt Battery Jump Start Procedure refer to Leaf Roadside Assistance Guide.

Tools:
- Standard Jump Box

1. Raise hood.
2. Place protective cover under jump box to prevent damage.
3. Locate fuse cover in engine compartment, depress 3 tabs and remove fuse cover.

4. Connect jump box to power in junction box.
   a. Positive (+) jumper cable to power threaded stud located in fuse box.
5. Connect jump box to engine ground.
   a. Negative (-) jumper cable to metal engine bracket located at the front of the engine.

   ![Image showing correct connection of jumper cables]

   **CAUTION:**
   - Always connect positive (+) to positive and negative (-) to engine ground as shown or damage to battery or person can occur.
   - Make sure jumper cables do not touch moving parts in engine compartment.
   - Wear proper PPE

7. Remove jump box cables from engine compartment in order:
   b. Remove negative (-) jumper cable.
   c. Remove positive (+) jumper cable.
   d. Reinstall fuse cover.
   e. Close the hood.

   **CAUTION:** DO NOT drive with jump box attached to Hybrid vehicle.

   **Note:** If vehicle is to be charged immediately after jump starting, release trunk switch before turning vehicle off.

Appendix D:
Charging a Hybrid 12 Volt Battery located in the Trunk

Notice: If vehicle is found on ground with a dead battery use Hybrid Jump Start procedures to activate trunk switch. It is not necessary to start engine.

WARNING:
- For Leaf EV 12 Volt Battery Jump Start Procedure refer to Leaf Roadside Assistance Guide.

Tools:
- Standard Jump Box
- Small Flat Head Screwdriver

1. Open trunk. Locate 12 volt battery in the trunk. Remove access panel 4 push pins by twisting counterclockwise.
Battery charging should be done with an ‘Intelligent Charger’ that has a low charge rate and “pulsing technology”. Chargers are required to have an automatic shut-off to prevent overcharging. Charge a battery for no longer than 24 hours.

2. Connect charger to battery in trunk in the following order: Positive (+) charger cable to red positive (+) battery post and then negative (-) battery charger cable to black negative post (-).

3. Remove Charger cables from engine compartment in order:
   f. Remove negative (-) charge cable.
   g. Remove positive (+) charge cable.

4. Attach battery access panel. Center of pushpin must be pulled out, insert into the hole and push inward. Turning the pushpin will not secure the cover.

5. If battery needs to be replaced, notify WWL.