

# Your Ultimate Source for OEM Repair Manuals

FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2015 NISSAN Leaf OEM Service and Repair Workshop Manual

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- 2 Remove the water cooler inlet hose from the electric water pump.
- 3 Remove the front suspension member. Refer to FRONT SUSPENSION MEMBER: Removal & Installation.
- 4 Remove the water cooler inlet hose right.
- 5 Remove the water cooler inlet hose left.
- 6 Remove the electric water pump inlet tube.

## **INSTALLATION**

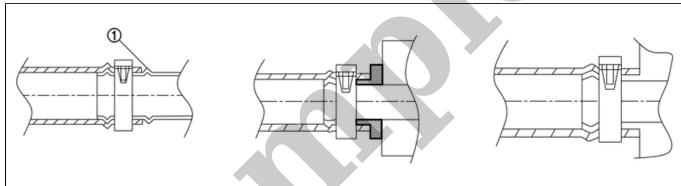
Note the following, and install in the reverse order of removal.

#### **CAUTION:**

Be sure to perform air bleeding properly after refilling coolant.

## **WATER HOSE**

• When inserting the radiator hose and water hose, insert all the way until it contacts double spool 1, or it contacts the end.



RPR-002038672-44-000347008

• Refer to the following table when installing the hose clamps.

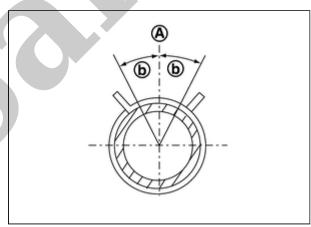
Location of hose	Hose end	Direction of Paint mark	Direction of hose clamp tabs  RPR-002038672-13-PCIA0366ZZ  Vehicle upper  Vehicle front
Reservoir tank hose	Reservoir tank side	Vehicle upper	RPR-002038672-15-PCIA0362ZZ

			Direction of hose clamp tabs
Location of hose	Hose end	Direction of Paint mark	RPR-002038672-13-PCIA0366ZZ  : Vehicle upper  Vehicle front
	Water cooler inlet hose side	Vehicle left	NOTE: Clamp is glued to hose.
	Electric water pump side	Vehicle rear	RPR-002038672-17-000363826
Water cooler inlet hose	Electric water pump inlet tube ASSY right side	Vehicle lower left	RPR-002038672-18-000363828
Electric water pump inlet tube ASSY right	LI-ION battery side	Vehicle lower	RPR-002038672-19-SBIA4312ZZ
	Water cooler inlet hose side	Vehicle lower left	NOTE: Clamp is glued to hose.
Water cooler inlet hose right	Electric water pump inlet tube ASSY	Vehicle upper	

Location of hose	Hose end	Direction of Paint mark	PR-002038672-13-PCIA0366ZZ  Chicle upper  Vehicle front  RPR-002038672-16-PCIA0362ZZ
	Electric water pump side	Vehicle upper	RPR-002038672-20-PCIA0362ZZ
	Battery coolant cooler side	Vehicle front	RPR-002038672-21-PCIA0360ZZ
Water cooler inlet hose left	Electric water pump inlet tube ASSY side	Vehicle rear lower	RPR-002038672-22-PBIA6939ZZ
Water cooler outlet hose	Battery coolant cooler side	Vehicle upper	RPR-002038672-23-SCIA1106ZZ
	Electric water pump inlet tube ASSY cover left side	Vehicle rear left	<b>☆</b>

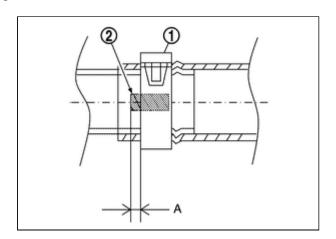
Location of hose	Hose end	Direction of Paint mark	Direction of hose clamp tabs  RPR-002038672-13-PCIA0366ZZ  Vehicle upper  Vehicle front
			RPR-002038672-11-000363829
Electric water pump inlet tube ASSY cover left	Water cooler outlet hose side	Vehicle lower rear	NOTE: Clamp is glued to hose.
	LI-ION battery side	Vehicle lower	RPR-002038672-12-SBIA4312ZZ

• The direction of the hose clamp tabs must be within ±30° b of the indicated position A.



RPR-002038672-38-PBIA4295ZZ

• When installing hose clamp 1, check that the distance "A" between the end of the radiator hose paint mark 2 and the hose clamp is within the specified range.





# INSPECTION AFTER INSTALLATION

• Check radiator for coolant leakage with radiator cap tester (commercial service tool).

Refer to COOLANT: Inspection.

• Start the electric pump, and check the joints for coolant leakage.



- Use recommended gear oil only. Refer to MAINTENANCE: Recommended Fluid and Lubricants.
- Never reuse gear oil, once it has been drained.
- Check oil level or replace gear oil with vehicle on level surface.
- During removal or installation, keep inside of rear final drive unit clear of dust or dirt.
- Check for the correct installation status prior to removal or disassembly. If matching marks are required, be certain they never interfere with the function of the parts when applied.
- Gaskets, seals and O-rings should be replaced any time when the unit is disassembled.
- In principle, tighten bolts or nuts gradually in several steps working diagonally from inside to outside. If tightening sequence is specified, observe it.
- Never damage sliding surfaces and mating surfaces.
- When applying sealant, remove the old sealant from the mounting surface; then remove any moisture, oil, and foreign materials from the application and mounting surfaces.



#### DANGER

Since hybrid vehicles and electric vehicles contain a high voltage battery, there is the risk of electric shock, electric leakage, or similar accidents resulting in death or severe injury, if high voltage components and vehicle are mishandled. When performing an inspection or maintenance, be sure to comply with the instructions below to perform correct work procedures.

#### **WARNING:**

- Be sure to remove the service plug in order to disconnect the high voltage circuits before performing inspection or maintenance of high voltage system harnesses and parts.
- The removed service plug must always be carried in a pocket of the responsible worker or placed in the tool box during the procedure to prevent the plug from being connected by mistake.
- Be sure to wear insulated protective equipment before beginning work on the high voltage system.
- Never allow workers other than the responsible person to touch the vehicle containing high voltage parts. To keep
  others from touching the high voltage parts, these parts must be covered with an insulating sheet except when
  using them.

#### **CAUTION:**

- Be sure to install the high voltage harness clips to the original positions to prevent damage to high voltage harness. If the clips are damaged, replace them with new ones before installing the high voltage harness.
- To prevent damage to parts, never allow coolant to splash on the high voltage harness connector. If coolant splashes on the high voltage harness connector, immediately remove moisture from the high voltage harness connector by using an air blow gun.
- Never bring the vehicle into the READY status with the service plug removed unless otherwise instructed in the Service Manual. A malfunction may occur if this is not observed.

## POINT TO BE CHECKED BEFORE STARTING MAINTENANCE WORK

The high voltage system may starts automatically. It is required to check that the charge cable (including EVSE) is not connected to charge port before starting maintenance work.



If the timer air conditioner or timer charge is set when the EVSE is connected, the high voltage system starts automatically even when the power switch is in OFF state.

# HIGH VOLTAGE HARNESS AND EQUIPMENT IDENTIFICATION

All the high voltage harnesses and connectors are orange. The Li-ion battery and other high voltage devices include an orange high voltage label. Never touch these harnesses and high voltage parts.

### HANDLING OF HIGH VOLTAGE HARNESS AND TERMINALS

Immediately insulate disconnected high voltage connectors and terminals with insulating tape.

## GUIDELINES ON WORKERS WITH MEDICAL ELECTRONICS

#### **WARNING:**

The vehicle contains parts that contain powerful magnets. If a person who is wearing a heart pacemaker or other medical device is close to these parts, the medical device may be affected by the magnets. Such persons must not perform work on

the vehicle.

# PROHIBITED ITEMS TO CARRY DURING THE WORK

Hybrid vehicles and electric vehicles contain parts with high voltage and intense magnetic force. Never carry metal products and magnetic recording media (e.g. credit card, debit card) to repair/inspect high voltage parts. If this is not observed, the metal products may create a risk of short circuit and the magnetic recording media may lose their magnetic recording.

## POST A SIGN OF "DANGER! HIGH VOLTAGE AREA. KEEP OUT"

Call the attention of other workers and indicate "High voltage work in progress." Do not touch vehicles where work is being performed on high voltage systems.

