

# 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.

## 2010 NISSAN NP300 Pickup Double Cab OEM Service and Repair Workshop Manual

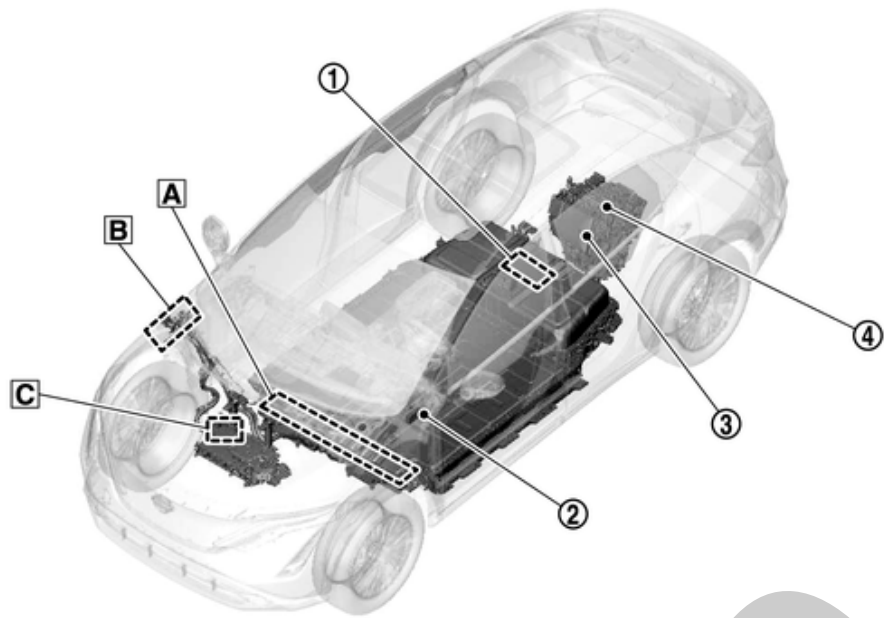
[Go to manual page](#)

	For details on the installation position, Refer to <a href="#">Component Parts Location</a> .			
④	System main relay 1	⑤	System main relay 2	⑥ Charge connector lock actuator For details on the installation position, Refer to <a href="#">Component Parts Location</a> .
⑦	Charge port lid actuator For details on the installation position, Refer to <a href="#">Component Parts Location</a> .	⑧	Charge port light For details on the installation position, Refer to <a href="#">Component Parts Location</a> .	⑨ Charge port For details on the installation position, Refer to <a href="#">Component Parts Location</a> .
⑩	Electric water pump 2			
A	Li-ion battery junction box	B	Charge port	C Right upper side of motor room

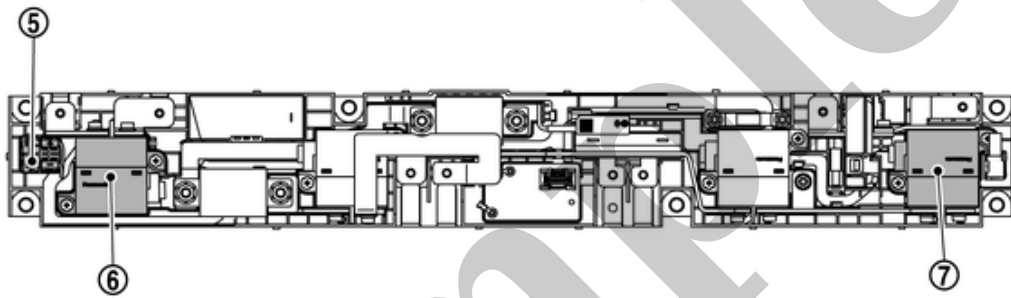
## 91kWh Li-ion Battery, AWD models

### Vehicle Compartment

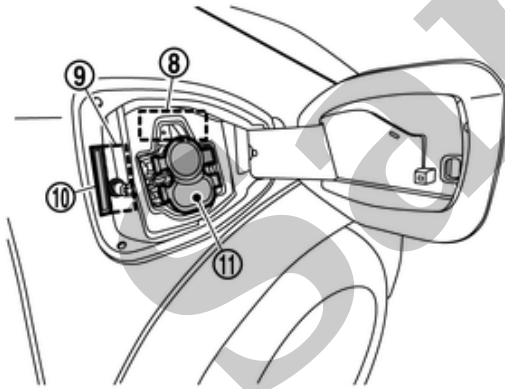
Sample



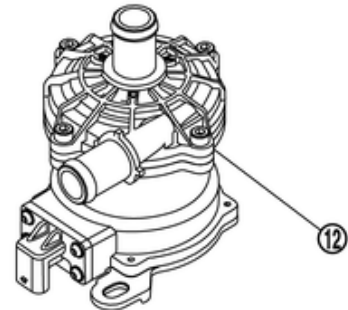
**A**



**B**



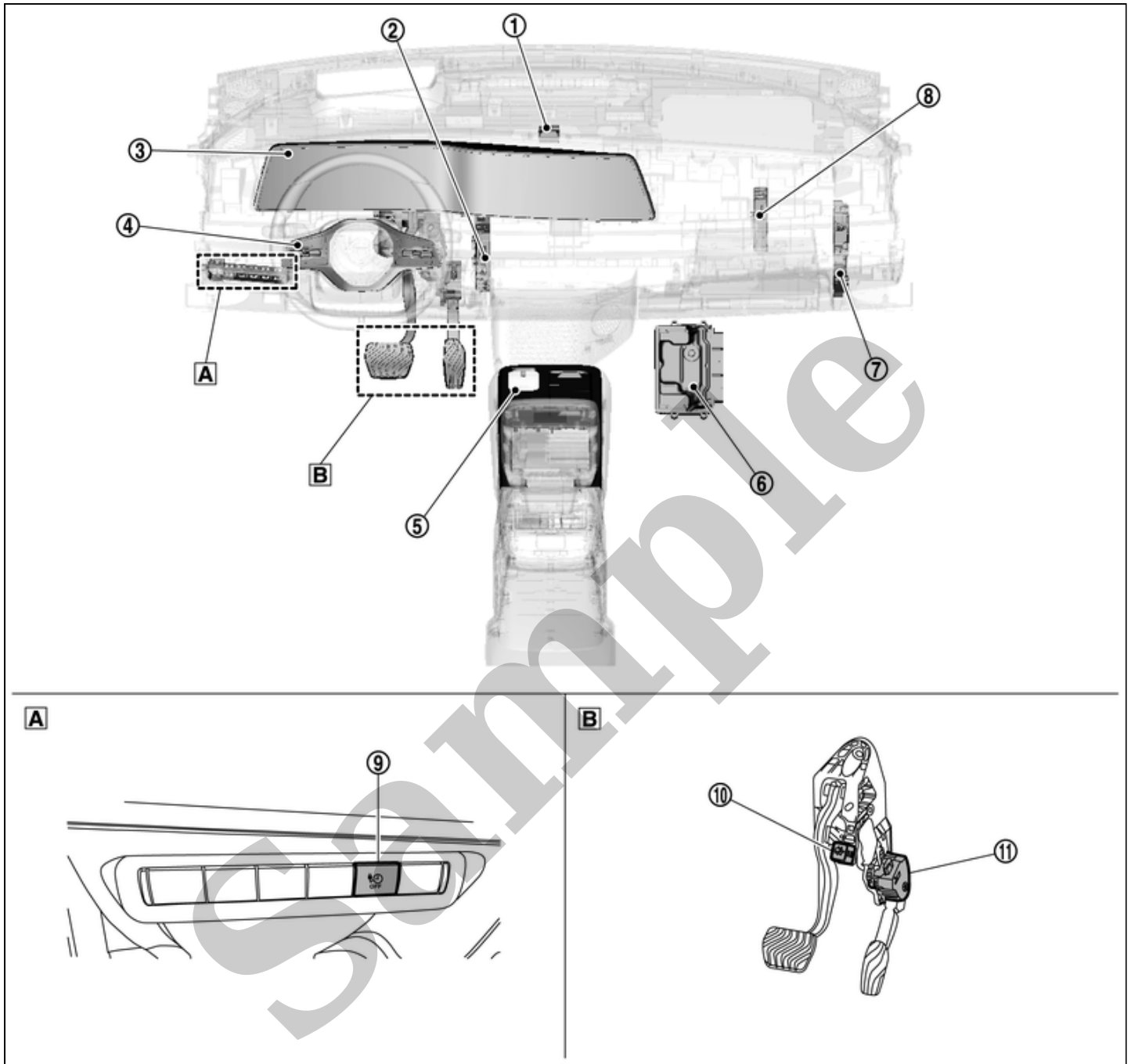
**C**



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	Li-ion battery controller				
①	For details on the installation position, Refer to <a href="#">Component Parts Location</a> .	②	VSP control unit	③	Inverter (rear)
④	Rear traction motor	⑤	Pre-charge relay	⑥	System main relay 1
⑦	System main relay 2		Charge connector lock actuator		Charge port lid actuator
		⑧	For details on the installation position, Refer to <a href="#">Component Parts Location</a> .	⑨	For details on the installation position, Refer to <a href="#">Component Parts Location</a> .
⑩	Charge port light		Charge port		
		⑪	For details on the installation position, Refer to <a href="#">Component Parts Location</a> .	⑫	Electric water pump 2

## Interior Compartment



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<p>① Charging status indicator</p> <p>For details on the installation position, Refer to <a href="#">Component Parts Location</a>.</p>	<p>② TCU</p> <p>For details on the installation position, Refer to <a href="#">Component Parts Location</a>.</p>	<p>③ Combination meter</p> <p>For details on the installation position, Refer to <a href="#">Component Parts Location</a>.</p>
<p>④ ProPILOT Assist/ProPILOT Assist 2.0 steering switch</p>	<p>⑤ e-Pedal switch</p> <p>For details on the installation position, Refer to <a href="#">Component Parts Location</a>.</p>	<p>⑥ VCM</p>
<p>⑦ BCM</p> <p>For details on the installation position, Refer to <a href="#">Component Parts Location</a>.</p>	<p>⑧ A/C auto amp.</p> <p>For details on the installation position, Refer to <a href="#">Component Parts Location</a>.</p>	<p>⑨ Immediate charging switch</p> <p>For details on the installation position, Refer to <a href="#">Component Parts Location</a>.</p>
<p>⑩ Stop lamp switch</p>	<p>⑪ Accelerator pedal position sensor</p>	

**A**

Switch panel

**B**Accelerator pedal and brake pedal  
upper part

Sample

## FUNCTIONS WITHIN THE SYSTEM

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The system main relay 1 that is controlled by VCM connects and disconnects the high-voltage circuit (+) side and Li-ion battery.

When the pre-charge to the condenser in the inverter (front) is completed while high voltage power is supplied, VCM activates the system main relay 1 ON to supply power from the Li-ion battery to the EV system.

## INDIVIDUAL FUNCTION WITHIN THE SYSTEM

---

The system main relay 1 connects and disconnects of the power supply circuit by ON / OFF of the relay switch.

## COMPONENT PARTS LOCATION

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The system main relay 1 is integrated in the battery junction box of Li-ion battery .

The Li-ion battery is installed under the floor of the vehicle.

Sample

## FUNCTIONS WITHIN THE SYSTEM

---

The system main relay 2 that is controlled by VCM connects and disconnects the high-voltage circuit (-) side and Li-ion battery.

VCM activates the system main relay 2 ON to supply power from the Li-ion battery to the EV system while high voltage power is supplied.

## INDIVIDUAL FUNCTION WITHIN THE SYSTEM

---

The system main relay 2 connects and disconnects of the power supply circuit by ON / OFF of the relay switch.

## COMPONENT PARTS LOCATION

---

The system main relay 2 is integrated in the battery junction box of the Li-ion battery.

The Li-ion battery is installed under the floor of the vehicle.

Sample

## FUNCTIONS WITHIN THE SYSTEM

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VCM controls the electric water pump 1 to adjust the amount of pressure feed according to the vehicle speed and water temperature.

## INDIVIDUAL FUNCTION WITHIN THE SYSTEM

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The electric water pump 1 feeds coolant by pressure, which circulates in the high voltage system cooling circuit.

## INDIVIDUAL OPERATION

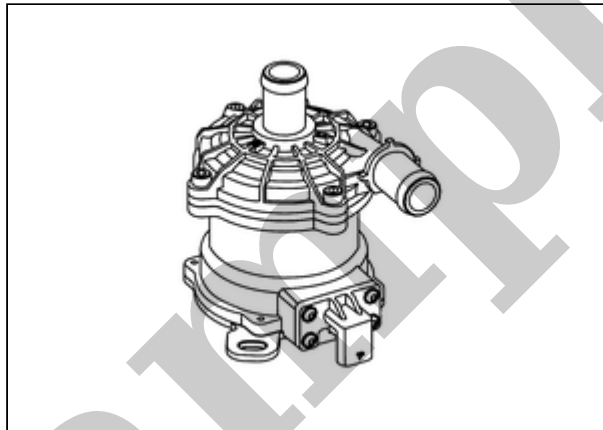
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The electric water pump 1 integrates an interface circuit that monitors the pump function for any malfunction, and it transmits a malfunction signal to VCM if necessary.

## COMPONENT PARTS LOCATION

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The electric water pump 1 is installed in the lower side of the electric compressor.



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## FUNCTIONS WITHIN THE SYSTEM

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VCM controls the electric water pump 2 to adjust the amount of pressure feed according to the vehicle speed and water temperature.

## INDIVIDUAL FUNCTION WITHIN THE SYSTEM

---

The electric water pump 2 feeds coolant by pressure, which circulates in the Li-ion battery.

## INDIVIDUAL OPERATION

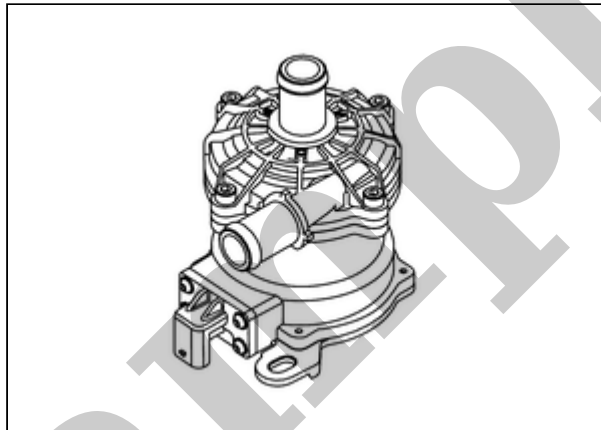
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The electric water pump 2 integrates an interface circuit that monitors the pump function for any malfunction, and it transmits a malfunction signal to VCM if necessary.

## COMPONENT PARTS LOCATION

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The electric water pump 2 is installed on the front suspension member of front right of vehicle.



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## FUNCTIONS WITHIN THE SYSTEM

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The electric water pump relay supplies 12V power to the electric water pump 1 and electric water pump 2. VCM turns on the electric water pump relay during power switch ON and supplies power to the electric water pump 1 and electric water pump 2.

## INDIVIDUAL FUNCTION WITHIN THE SYSTEM

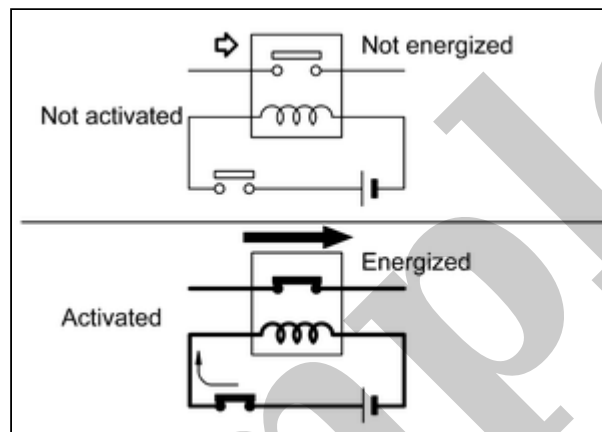
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The electric water pump relay connects and disconnects the power supply circuit by ON / OFF of the relay switch.

## INDIVIDUAL OPERATION

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The electric water pump adopts normal open type.



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## COMPONENT PARTS LOCATION

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The electric water pump is installed in the relay box of front right side of the vehicle.