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2012 NISSAN Quest OEM Service and Repair Workshop Manual

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1. CHECK VIN

Check VIN of vehicle and note it. For VIN stamped position, Refer to Information About Identification or Model Code.

>>

GO TO 2 .

2. PERFORM VIN REGISTRATION

With CONSULT

1. Power switch ON.

> **CAUTION:**
> **Never select READY**

2. Select “VIN REGISTRATION” at "WORK SUPPORT" mode on the CONSULT screen.
3. Follow the instructions on the CONSULT screen.

>>

END

Description

SIEMD-7201623

Accelerator Pedal Fully Closed Position Learning is a function of VCM to learn the fully released position of the accelerator pedal by monitoring the accelerator pedal position sensor output signal. This work must be performed each time the harness connector of the accelerator pedal position sensor or VCM harness connector is disconnected. (For details, refer to Work Procedure.)

1. ACCELERATOR PEDAL FULLY CLOSED POSITION LEARNING

1. Check that accelerator pedal is fully closed position.

2. Wait for 10 seconds or longer after power switch is ON.

3. Turn OFF high voltage system by pushing power switch for two seconds or longer, and check that charge indicator is turned OFF.

   NOTE:
   When high voltage system is ON, charge indicator flashes green every second.

4. Repeat step 2 and step 3 four times.

5. After turning OFF the high voltage system, open driver's door, get out vehicle, close driver's door, and wait for 5 minutes or more.

   CAUTION:
   Since the accessory power is turned ON by the auto ACC function, never operate the vehicle such as door lock operation or door open/close during standby.

   If operating the vehicle, wait for least 5 minutes from that point.

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END

Diagnosis Procedure

SIEMD-7197060

Symptom			Possible cause	Action
No regeneration	Amount of regeneration is limited.	Inverter (front) limits output	Fail-safe of inverter (front).	Refer to Fail-safe.
			Temperature of front traction motor or inverter (front) is high.	Check the self-diagnosis result of inverter (front).
		LBC limits output.	Fail-safe of LBC	Refer to Fail-safe(66kWh LI-ION BATTERY), Fail-safe(91kWh LI-ION BATTERY).
			Damaged bus bar (connecting part of Li-ion battery module)	Check bus bar.
			Degradation in Li-ion battery temperature sensor characteristics	Check self-diagnosis result of Li-ion battery.
			Temperature of Li-ion battery is too high/low.	
			Li-ion battery is fully charged.	Normal operation
		ABS actuator and C/U limits output.	ABS operates	Normal operation
			Abnormal the vehicle speed sensor of ABS actuator C/U	Perform self-diagnosis of ABS actuator C/U
		Electric brake control unit limits output.	Fail-safe of electric brake control unit	Refer to Fail-safe.
	Regeneration prohibit conditions are satisfied.	ABS actuator and C/U limits output.	VDC operates	Normal operation
		—	Under full braking.	Normal operation
	Amount of target regeneration changes.	Driving mode is changed.	ECO mode or B mode is cancelled	Normal operation
			Range changes to N.	If e-Pedal is released without permission, self-diagnosis of IDM, electric control brake unit, ABS actuator C / U, and VCM will be performed.
		—	Brake applied during sharp turn.	Normal operation
		—	Slip is detected	Normal operation

Diagnosis Procedure

SIEMD-7197069

Symptom			Possible cause	Action
Unable to travel	Drive force is not generated.	Inverter (front) requests output limit.	Fail-safe of inverter (front)	Refer to Fail-safe.
		LBC requests output limit.	Fail-safe of LBC	Refer to Fail-safe(66kWh LI-ION BATTERY), Fail-safe(91kWh LI-ION BATTERY).
			The bus bar (Li-ion battery module connection part) is broken	Check bus bar.
			Li-ion battery is fully	Normal operation
		No transmission of motor output to drive wheels	Abnormal reduction gear	Check reduction gear.
	Drive force is generated.	Brake is applied	Brake dragging.	Check for brake dragging.
		A brake signal is input to ABS actuator and C/U.	Abnormal stop lamp switch signal line.	Check the signal line between stop lamp switch and ABS actuator and C/U
		PKB is applied	Brake drag	Check brake drag

SIEMD-7197055

Symptom			Possible cause	Action
Decelerating force changes	Amount of regeneration is limited	Inverter (front) limits output.	Fail-safe of inverter (front).	Refer to Fail-safe.
			Temperature of front traction motor or inverter (front) is high.	Check self-diagnosis result of inverter (front).
		LBC limits output.	Fail-safe of LBC.	Refer to Fail-safe(66kWh LI-ION BATTERY), Fail-safe(91kWh LI-ION BATTERY).
			Damaged bus bar (connecting part of Li-ion battery module).	Check bus bar.
			Degradation in Li-ion battery temperature sensor characteristics	Check the “POWER LIMIT CAUSE” in the DATA MONITOR of VCM
			Temperature of Li-ion battery is too high/low.	
			Li-ion battery is fully charged	Normal operation
		ABS actuator and C/U limits output.	Abnormal vehicle speed sensor of ABS actuator and C/U	Perform self-diagnosis of ABS actuator and C/U
	Amount of target regeneration changes	Drive mode is changed.	Change to ECO mode, SPORT mode, B range, or e-Pedal.	Normal operation
			ECO mode, SPORT mode, B range, or e-Pedal is cancelled	Perform self-diagnosis of IDM, electric controlled intelligent brake unit, ABS actuator & C/U, and VCM, if e-Pedal is released automatically
		—	Accelerator pedal is depressed	Normal operation

Symptom Table

SIEMD-7197053

NOTE:

- **Perform self-diagnosis with CONSULT before conducting trouble diagnosis for each symptom.**
- **If DTC is detected, first perform trouble diagnosis of the corresponding DTC.**

Symptom	Reference page
READY status cannot be achieved	Refer to Diagnosis Procedure.
Unable to travel	Refer to Diagnosis Procedure.
Low electrical consumption	Refer to Diagnosis Procedure.
Power switch does not turn OFF	Refer to Diagnosis Procedure.
No regeneration	Refer to Diagnosis Procedure.
Decelerating force changes	Refer to Diagnosis Procedure.
Normal charge does not start	Refer to Diagnosis Procedure.
Timer charge or remote charge does not start	Refer to Diagnosis Procedure.
Immediate charge does not start	Refer to Diagnosis Procedure.
Normal charge does not completed	Refer to Diagnosis Procedure.
Quick charge does not start	Refer to Diagnosis Procedure.
Quick charge does not completed	Refer to Diagnosis Procedure.
Full cahrge cannot be achieved	Refer to Diagnosis Procedure.
Timer A/C does not operate	Refer to Diagnosis Procedure.
A/C before getting in does not operate	Refer to Diagnosis Procedure.

Diagnosis Procedure

SIEMD-7197058

Symptom			Possible cause	Action
Low electrical consumption	Front traction motor and rear traction motor requires a large amount of power.	Running resistance of tires is high.	Low tire pressure.	Adjust tire pressure
			Tire size is not of standard size.	'Install standard-size tires.
		Parking brake is applied.	Abnormal electric parking brake control module.	Perform self-diagnosis of electric parking brake control module.
			Abnormal parking actuator.	
		Brake applied.	Brake dragging.	Check reduction dragging
		Sliding resistance of reduction gear is high	Abnormal reduction gear.	Check reduction gear.
	A/C requires a large amount of power.	Electric compressor requires large amount of power.	Set temperature is low.	Adjust the set temperature
			Abnormal A/C auto amp.	Perform self-diagnosis of A/C auto amp.
		PTC heater requires large amount of power.	Set temperature is high.	Adjust the set temperature
			Abnormal A/C auto amp.	Perform self-diagnosis of A/C auto amp.
	Low efficient Li-ion battery.		Incorrect service plug connection.	Check installation condition of service plug.

SIEMD-7197064

When not connected to V2H

Symptom			Possible cause	Action
Quick charge does not start	Quick charge start condition is not satisfied	VCM recognizes that selector lever is in except P range.	Electric shift control system error	Perform self-diagnosis of electric shift control module
			Selector lever is in except P range	Selector lever is shifted to P range
		—	Power switch is not OFF	Normal operation
		VCM recognizes that quick charge connector and normal charge connector are simultaneously connected.	Both normal charge connector and quick charge connector are connected at the same time.	Normal operation Refer to Symptom Description.
			Connection detection circuit of normal charge port is abnormal.	Check normal charge port.
			In-vehicle charger is abnormal	Perform self-diagnosis of in-vehicle charger
		VCM recognizes that quick charge connector is not connected.	Quick charge connector is not connected.	Normal operation
			Connection detection circuit of quick charge port is abnormal.	Perform self-diagnosis of VCM
				Check the harness between quick charge port and VCM
				Check quick charge port
		VCM prohibits charging	Fail-safe of VCM.	Refer to Fail-safe.
		Activation signal from quick charger cannot be received	Activation signal circuit malfunctions	Perform self-diagnosis of VCM
				Check the harness between quick charge port and VCM
				Check quick charge port
		Judged as full charge	—	Check quick charger
	Quick charger does no permit quick charge	Quick charger detects high voltage circuit insulation degradation	—	Refer to Diagnosis Description.
		Quick charger malfunctions	—	Check quick charger

When connected to V2H

Symptom			Possible cause	Action
Quick charge does not start	Vehicle does not permit	VCM recognizes that selector lever is in except P range.	Electric shift control system error	Perform self-diagnosis of electric shift control module
			Selector lever is in except P range	Selector lever is shifted to P range
		—	Power switch is not OFF	Normal operation
		VCM recognizes that quick charge connector and normal charge connector	Both normal charge connector and quick charge connector are	Normal operation. Refer to Symptom