

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.

2012 NISSAN Altima Coupe OEM Service and Repair Workshop Manual

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Check self-diagnostic result in “HVBATTERY”.

Is DTC detected other than P1001-78?

YES>>

Perform diagnosis for detected DTC. Refer to [DTC Index](#).

NO>>

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4. PRECONDITIONING

WARNING:

Follow the instructions below before starting the procedure.

1. Disconnect high voltage circuit. Refer to [HOW TO DISCONNECT HIGH VOLTAGE : Precautions](#).
2. Check voltage in high voltage circuit. Refer to [CHECK VOLTAGE IN HIGH VOLTAGE CIRCUIT : Precautions](#).

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5. CHECK HIGH VOLTAGE HARNESS CONNECTOR INSTALLATION CONDITION

Check battery coolant heater (battery PTC heater) high voltage harness connector installation condition visually and tactually.

CAUTION:

When reconnecting the high voltage harness connector, insert it slowly and directly.

Is the inspection result normal?

YES>>

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NO>>

Repair or replace error-detected parts.

6. CHECK HIGH VOLTAGE HARNESS CONNECTOR

1. Disconnect battery coolant heater (battery PTC heater) high voltage harness connector.
2. Check the battery coolant heater (battery PTC heater) high voltage harness connector and the battery coolant heater (battery PTC heater) connector visually for any abnormality.

Is the inspection result normal?

YES>>

INSPECTION END

NO>>

Repair or replace error-detected parts.

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detecting condition	
P1041	87	Front traction motor inverter	Diagnosis condition	READY
			Signal	—
			Threshold	Cannot receive signal from inverter (front)
			Detection time	—

POSSIBLE CAUSE

Inverter (front)

FAIL-SAFE

Not applicable

1. PRECONDITIONING

1. Press the power switch for at least 2 seconds to turn the high voltage system OFF and then check that the charging status indicator is not illuminated.

**NOTE:**

When the high voltage system is turned ON, the charging status indicator blinks green with a frequency of 1 second.

2. After the high voltage system is turned OFF, open the driver's side door, get out of the vehicle, close the driver's side door and wait for at least 5 minutes.

CAUTION:

- Since the auto ACC function causes the accessory power to be turned ON, do not perform any vehicle operation including locking the doors or opening and closing of the doors during the standby state.

If an operation is performed, wait an additional 5 minutes from that time.

- Check that 12V battery voltage is 11 V or more.

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2. PERFORM DTC CONFIRMATION PROCEDURE-1

 With CONSULT

1. Set the vehicle to READY and wait at least 10 seconds.
2. Check self-diagnostic result in “EV/HEV”.

Is DTC detected?

YES>>

Refer to [DTC Diagnosis Procedure](#).

NO>>

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3. PERFORM DTC CONFIRMATION PROCEDURE-2

 With CONSULT

1. Perform driving test.
2. Check self-diagnostic result in “EV/HEV”.

Is DTC detected?

YES>>

Refer to [DTC Diagnosis Procedure](#).

NO-1>>

To check malfunction symptom before repair: Refer to [Intermittent Incident](#).

NO-2>>

Confirmation after repair: INSPECTION END

Sample

1. CHECK DTC IN INVERTER (FRONT)

Check if there is any DTC in inverter (front).

Is DTC detected?

YES>>

Perform diagnosis for detected DTC.Refer to [DTC Index](#).

NO>>

Replace VCM.Refer to [VCM : Removal & Installation](#).

Sample

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detecting condition	
P1041	96	Front traction motor inverter	Diagnosis condition	READY
			Signal	—
			Threshold	The operation mode request to inverter (front) and inverter (front) actual mode are not matching
			Detection time	—

POSSIBLE CAUSE

- Inverter (front)
- VCM

FAIL-SAFE

Not applicable

1. PRECONDITIONING

1. Press the power switch for at least 2 seconds to turn the high voltage system OFF and then check that the charging status indicator is not illuminated.

**NOTE:**

When the high voltage system is turned ON, the charging status indicator blinks green with a frequency of 1 second.

2. After the high voltage system is turned OFF, open the driver's side door, get out of the vehicle, close the driver's side door and wait for at least 5 minutes.

CAUTION:

- Since the auto ACC function causes the accessory power to be turned ON, do not perform any vehicle operation including locking the doors or opening and closing of the doors during the standby state.

If an operation is performed, wait an additional 5 minutes from that time.

- Check that 12V battery voltage is 11 V or more.

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2. PERFORM DTC CONFIRMATION PROCEDURE-1

 With CONSULT

1. Set the vehicle to READY and wait at least 10 seconds.
2. Check self-diagnostic result in “EV/HEV”.

Is DTC detected?

YES>>

Refer to [DTC Diagnosis Procedure](#).

NO>>

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3. PERFORM DTC CONFIRMATION PROCEDURE-2

 With CONSULT

1. Perform driving test.
2. Check self-diagnostic result in “EV/HEV”.

Is DTC detected?

YES>>

Refer to [DTC Diagnosis Procedure](#).

NO-1>>

To check malfunction symptom before repair: Refer to [Intermittent Incident](#).

NO-2>>

Confirmation after repair: INSPECTION END

Sample

1. CHECK DTC IN INVERTER (FRONT)

Check if there is any DTC in inverter (front).

Is DTC detected?

YES>>

Perform diagnosis for detected DTC. Refer to [DTC Index](#).

NO>>

Replace VCM. Refer to [VCM : Removal & Installation](#).

Sample