

Your Ultimate Source for OEM Repair Manuals

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2010 NISSAN Sentra SE-R OEM Service and Repair Workshop Manual

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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.



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.

>>

GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE

- (I) With CONSULT
 - 1. Perform normal charge and wait for at least 10 seconds.
 - 2. Power switch ON.
 - 3. 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

1. CHECK EVSE CONNECTING SIGNAL CIRCUIT

Check EVSE connecting signal circuit. Refer to Diagnosis Procedure.

Is the inspection result normal?

YES>>

GO TO 2

NO>>

Repair or replace error-detected parts.

2. CHECK CHARGE PORT CIRCUIT

Check charge port circuit. Refer to Diagnosis Procedure.

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		
P15A7	31	Charging system	Diagnosis condition	During normal charge	
			Signal	EVSE connecting signal	
			Threshold	Charging status does not change when normal charge is engaged (The normal charge cable is in a state of being engaged or it does become a state of normal charge)	
			Detection time	More than 328 seconds	

POSSIBLE CAUSE

- Harness and connector (EVSE communication circuit)
- Normal charge port
- VCM

FAIL-SAFE

- Quick charge is prohibited
- Normal charge is prohibited

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>>

GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE

- (I) With CONSULT
 - 1. Perform normal charge and wait for at least 6 minutes.
 - 2. Turn power switch ON.
 - 3. 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

1. CHECK ON-BOARD CHARGER SELF-DIAGNOSIS

(H)With CONSULT

Check self-diagnostic result in "CHARGER/PD MODULE".

Is DTC detected?

YES>>

Perform diagnosis for detected DTC. Refer to DTC Index.

NO>>

GO TO 2

2. CHECK CHARGE PORT CIRCUIT

Perform charge port circuit inspection. Refer to Diagnosis Procedure.

Is the inspection result normal?

YES>>

GO TO 3

NO>>

Repair or replace error-detected parts.

3. TROUBLE CAUSE SIMULATION TEST

Perform trouble cause simulation test. Refer to Intermittent Incident.

Is the inspection result normal?

YES>>

Replace VCM. Refer to VCM: Removal & Installation.

NO>>

Repair or replace error-detected parts.

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detecting condition		
P15AA	73	Charging system	Diagnosis condition	Except during normal charge connector connection and charging	
			Signal	Normal charge permission signal	
			Threshold	OFF	
			Detection time	More than 6 seconds	

POSSIBLE CAUSE

- VCM
- EVSE (EVSE malfunction or old standard EVSE is used.)



The old standard EVSE cannot be used.

FAIL-SAFE

- Quick charge is prohibited
- Normal charge is prohibited

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CAUTION:

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

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

>>

GO TO 2.

2. PERFORM DTC CONFIRMATION PROCEDURE

(II) With CONSULT

1. Set the timer charge does not overlap with the inspection time.

CAUTION:

- Just connect the EVSE, but do not perform charging.
- When the timer charge is not set, since charging is started as soon as the EVSE is connected, proper procedure cannot be performed.
- 2. Connect the EVSE



- Use an EVSE that has been checked to operate normally.
- The old standard EVSE cannot be used.
- 3. Turn ON the power switch with the EVSE connected and wait at least 10 seconds.
- 4. Check self-diagnostic result in "EV/HEV".

Is DTC detected?

YES>>

Refer to DTC Diagnosis Procedure.

NO-1>>

To check malfunction symptom before repair: <u>GO TO 3</u>.

Confirmation after repair: INSPECTION END

3. CHECK EVSE FUNCTION



When DTC is not detected using the EVSE that already checked to work properly, the vehicle does not have a problem but the EVSE itself may have.

- (II) With CONSULT
 - 1. Erase self-diagnostic result in "EV/HEV" using CONSULT.
 - 2. Conduct an interview with the customer and confirm the EVSE that could not be charged.



When the EVSE that prevented charging is unknown, perform trouble cause simulation test. Refer to <u>Intermittent Incident</u>.

3. Set the timer charge does not overlap with the inspection time.

CAUTION:

- Just connect the EVSE, but do not perform charging.
- When the timer charge is not set, since charging is started as soon as the EVSE is connected, proper procedure cannot be performed.
- 4. Connect the EVSE that could not be charged.
- 5. Turn ON the power switch with the EVSE connected and wait at least 10 seconds.
- 6. Check self-diagnostic result in "EV/HEV".

Is DTC detected?

YES>>

Check EVSE. Refer to Symptom Table(120V/240V EVSE), Symptom Table(120V EVSE).

NO>>

Perform intermittent incident. Refer to Intermittent Incident.

1. PERFORM CONFIRMATION PROCEDURE AGAIN

(H) With CONSULT

- 1. Erase self-diagnostic result in "EV/HEV" using CONSULT.
- 2. Perform DTC confirmation procedure again with a different EVSE than the EVSE that was used when performing the DTC confirmation procedure the previous time.

CAUTION:

- Use an EVSE that has been checked to operate normally.
- The old standard EVSE cannot be used.

Is DTC P15AA-73 detected again?

YES>>

Replace VCM. Refer to VCM: Removal & Installation.

NO>>

Check EVSE. Refer to Symptom Table(120V/240V EVSE), Symptom Table(120V EVSE).

