

# 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.

2011 NISSAN Sentra 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.

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#### GO TO 2.

## 2. PERFORM DTC CONFIRMATION PROCEDURE

- (I) With CONSULT
  - 1. Power switch ON and wait at least 10 seconds.
  - 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

## 1. CHECK ACTIVE GRILLE SHUTTER 1

Check active grille shutter 1. Refer to Component Inspection.

Is the inspection result normal?

YES>>

INSPECTION END

NO>>

Replace Active grille shutter. Refer to Removal & Installation.



# DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detecting condition		
	97	Active grille shutter 1	Diagnosis condition	Power switch ON	
P1503			Signal	LIN communication signal (Active grille shutter 1)	
P1303			Threshold	When a stuck in the open position malfunction signal from active grille shutter 1 is received	
			Detection time	More than 0.5 seconds	

# **POSSIBLE CAUSE**

Active grille shutter 1

# **FAIL-SAFE**

Not applicable



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# DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detecting condition		
	F7	Active grille shutter 1	Diagnosis condition	Power switch ON	
P1503			Signal	LIN communication signal (Active grille shutter 1)	
P1303			Threshold	When a mechanical malfunction signal from active grille shutter 1 is received	
			Detection time	More than 4.8 seconds	

# **POSSIBLE CAUSE**

Active grille shutter 1

# **FAIL-SAFE**

Not applicable



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Check active grille shutter 1. Refer to Component Inspection.

Is the inspection result normal?

YES>>

INSPECTION END

NO>>

Replace Active grille shutter . Refer to Removal & Installation.



# **DTC DETECTION LOGIC**

DTC		CONSULT screen terms	DTC detecting condition		
P2504	21	Charging system voltage	Diagnosis condition	READY	
			Signal	12V battery power supply signal (Terminal number 158)	
F2304			Threshold	12V battery power supply signal is detected to be less than 9V	
			Detection time	More than 20 seconds	

# **POSSIBLE CAUSE**

- DC/DC converter
- Harness and connector (12V battery power supply circuit)
- VCM

# **FAIL-SAFE**

Not applicable

