

# 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.

## 2002 NISSAN Sentra OEM Service and Repair Workshop Manual

[Go to manual page](#)

## 1. PRECONDITIONING

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If “Confirmation Procedure” has been previously conducted, always power switch OFF, get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors before conducting the next test.

>>

[GO TO 2](#)

## 2. CHECK DTC DETECTION

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 With CONSULT

1. Power switch OFF (Auto ACC is ON).
2. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

**CAUTION:**  
**Never operate the vehicle.**

3. Power switch ON without depressing the brake pedal.

**CAUTION:**  
**Never set the vehicle to READY.**

4. Perform self-diagnosis for “ABS”.

Is DTC “C106E-54” detected?

YES-1>>

“CRNT” is displayed: Refer to [DTC Diagnosis Procedure](#).

YES-2>>

“PAST” is displayed: INSPECTION END (Erase the memory of self-diagnosis results.)

NO-1>>

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

NO-2>>

Confirmation after repair: INSPECTION END

## 1. ADJUST THE NEUTRAL POSITION OF STEERING ANGLE SENSOR

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 With CONSULT

Perform neutral position adjustment of steering angle sensor. Refer to [Work Procedure](#).

>>

[GO TO 2.](#)

## 2. PERFORM SELF-DIAGNOSIS

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 With CONSULT

1. Power switch OFF (Auto ACC function ON).
2. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

**CAUTION:**  
Never operate the vehicle.

3. Power switch ON without depressing the brake pedal.

**CAUTION:**  
Never set the vehicle to READY.

4. Perform self-diagnosis for "ABS".

Is DTC "C106E-54" detected?

YES>>

[GO TO 3.](#)

NO>>

INSPECTION END

## 3. CHECK STEERING ANGLE SENSOR SYSTEM

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1. Power switch OFF.
2. Check the steering angle sensor system.
  - C106E-55: Refer to [DTC Diagnosis Procedure](#).
  - C106E-64: Refer to [DTC Diagnosis Procedure](#).
  - C106F-54: Refer to [DTC Diagnosis Procedure](#).

Is the inspection result normal?

YES>>

[GO TO 4.](#)

NO>>

Repair / replace harness, connector, or terminal.

## 4. CHECK DATA MONITOR

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 With CONSULT

1. Select “ABS”, “Data monitor” and “Steering angle” according to this order.
2. Check that the indication changes with the steering angle when the steering wheel is turned left/right from the neutral position.  
Refer to [Values On The Diagnosis Tool](#).

Is the inspection result normal?

YES>>

Replace the ABS actuator and electric unit (control unit). Refer to [ABS ACTUATOR AND ELECTRIC UNIT \(CONTROL UNIT\): Removal & Installation](#).

NO>>

Replace the steering angle sensor. Refer to [STEERING ANGLE SENSOR : Removal & Installation](#).

Sample

## DTC DETECTION LOGIC

DTC No.		CONSULT screen terms	DTC detection condition	
C106E	55	Steering angle sensor	Diagnosis condition	<ul style="list-style-type: none"> <li>Power switch is ON.</li> <li>When the power supply voltage is normal.</li> </ul>
			Signal (terminal)	CAN communication signal
			Threshold	When a malfunction is detected in steering angle sensor.
			Diagnosis delay time	1 second or less

## POSSIBLE CAUSE



**NOTE:**

Confirm if DTC is PAST or CRNT. If DTC is CRNT, proceed with Diagnosis Procedure. If DTC is PAST, clear DTC. Do not replace the ABS actuator and electric unit (control unit) for a PAST DTC.

PAST DTC	CRNT DTC
<ul style="list-style-type: none"> <li>Improper installation of steering angle sensor</li> <li>Harness or connector</li> <li>CAN communication line</li> <li>ABS actuator and electric unit (control unit) power supply system</li> <li>Fuse</li> <li>Fusible link</li> <li>12V battery</li> </ul>	<ul style="list-style-type: none"> <li>Improper installation of steering angle sensor</li> <li>Harness or connector</li> <li>CAN communication line</li> <li>Wheel alignment</li> <li>Steering angle sensor</li> <li>ABS actuator and electric unit (control unit)</li> <li>ABS actuator and electric unit (control unit) power supply system</li> <li>Fuse</li> <li>Fusible link</li> <li>12V battery</li> </ul>

## FAIL-SAFE

The following functions are suspended.

- VDC function
- TCS function
- hill start assist function
- Brake limited slip differential (BLSD) function
- Brake assist function
- Brake force distribution function

- Cooperative regenerative brake function

Sample

## 1. PRECONDITIONING

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If “Confirmation Procedure” has been previously conducted, always power switch OFF, get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors before conducting the next test.

>>

[GO TO 2](#)

## 2. CHECK DTC DETECTION

---

 With CONSULT

1. Power switch OFF (Auto ACC is ON).
2. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

**CAUTION:**  
**Never operate the vehicle.**

3. Power switch ON without depressing the brake pedal.

**CAUTION:**  
**Never set the vehicle to READY.**

4. Perform self-diagnosis for “ABS”.

Is DTC “C106E-55” detected?

YES-1>>

“CRNT” is displayed: Refer to [DTC Diagnosis Procedure](#).

YES-2>>

“PAST” is displayed: INSPECTION END (Erase the memory of self-diagnosis results.)

NO-1>>

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

NO-2>>

Confirmation after repair: INSPECTION END

## 1. ADJUST THE NEUTRAL POSITION OF STEERING ANGLE SENSOR

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 With CONSULT

Perform neutral position adjustment of steering angle sensor. Refer to [Work Procedure](#).

>>

[GO TO 2.](#)

## 2. PERFORM SELF-DIAGNOSIS (1)

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 With CONSULT

1. Power switch OFF (Auto ACC function ON).
2. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

**CAUTION:**  
Never operate the vehicle.

3. Power switch ON without depressing the brake pedal.

**CAUTION:**  
Never set the vehicle to READY.

4. Perform self-diagnosis for "ABS".

Is DTC "C106E-55" detected?

YES>>

[GO TO 3.](#)

NO>>

INSPECTION END

## 3. CHECK CONNECTOR

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1. Disconnect 12V battery negative terminal.
2. Check the ABS actuator and electric unit (control unit) harness connector for disconnection or looseness.
3. Check the steering angle sensor harness connector for disconnection or looseness.

Is the inspection result normal?

YES>>

[GO TO 5.](#)

NO>>

Repair / replace harness or connector, securely lock the connector. [GO TO 4.](#)

## 4. PERFORM SELF-DIAGNOSIS (2)

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1. Connect 12V battery negative terminal.
2. Power switch OFF (Auto ACC function ON).
3. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

**CAUTION:**  
**Never operate the vehicle.**

4. Power switch ON without depressing the brake pedal.

**CAUTION:**  
**Never set the vehicle to READY.**

5. Perform self-diagnosis for "ABS".

Is DTC "C106E-55" detected?

YES-1>>

"CRNT" is displayed: [GO TO 5.](#)

YES-2>>

"PAST" is displayed: INSPECTION END (Erase the memory of self-diagnosis results.)

NO>>

INSPECTION END

## 5. STEERING ANGLE SENSOR POWER SUPPLY

1. Disconnect 12V battery negative terminal.
2. Disconnect steering angle sensor harness connector.
3. Connect 12V battery negative terminal.
4. Check the voltage between steering angle sensor harness connector and ground.

+		—	Voltage
Steering angle sensor			
Connector	Terminal	Ground	Approx. 0 V
M122	8		

5. Power switch is ON.

6. Check the voltage between steering angle sensor harness connector and ground.

+		—	Voltage
Steering angle sensor			
Connector	Terminal	Ground	10 - 16 V
M122	8		

Is the inspection result normal?

YES>>

[GO TO 8.](#)

NO-1>>

Without ProPILOT Assist 2.0: [GO TO 6.](#)

NO-2>>

With ProPILPT Assist 2.0: [GO TO 7.](#)

## 6. STEERING ANGLE SENSOR POWER SUPPLY CIRCUIT (WITHOUT PROPILOT ASSIST2.0)

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1. Disconnect 12V battery negative terminal.
2. Check the 5A fuse (#7).
3. Disconnect fuse block (J/B) harness connector.
4. Check the continuity between steering angle sensor harness connector and fuse block (J/B).

Steering angle sensor		Fuse block (J/B)		Continuity
Connector	Terminal	Connector	Terminal	
M122	8	M72	115	Existed

5. Check the continuity between steering angle sensor harness connector and ground.

Steering angle sensor		—	Continuity
Connector	Terminal		
M122	8	Ground	Not existed

Is the inspection result normal?

YES>>

Perform trouble diagnosis for power switch ON power supply.

NO>>

Repair / replace harness, connector, or fuse.

## 7. STEERING ANGLE SENSOR POWER SUPPLY CIRCUIT (WITH PROPILOT ASSIST 2.0)

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1. Disconnect 12V battery negative terminal.
2. Check the 5A fuse (#118).
3. Check the continuity and short circuit between steering angle sensor harness connector terminal (8) and 5A fuse (#118).

Is the inspection result normal?

YES>>

Perform trouble diagnosis for power switch ON power supply.

NO>>

Repair / replace harness, connector, or fuse.

## 8. STEERING ANGLE SENSOR GROUND CIRCUIT

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