

# Your Ultimate Source for OEM Repair Manuals

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## 2001 NISSAN Almera / Pulsar 4 Doors OEM Service and Repair Workshop Manual

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[GO TO 21.](#)

NO>>

INSPECTION END

## 10. CHECK CONNECTOR

---

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 wheel sensor harness connector for disconnection or looseness.

Is the inspection result normal?

YES>>

[GO TO 13.](#)

NO>>

Repair / replace harness or connector, securely lock the connector. [GO TO 11.](#)

## 11. CHECK DATA MONITOR (2)

---

 With CONSULT

1. Connect 12V battery negative terminal.
2. Erase self-diagnosis result for “ABS”.
3. Power switch OFF (Auto ACC function ON).
4. 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.**

5. Set the vehicle to READY.
6. Select “ABS” and “Data monitor”, check “Front left wheel speed”, “Front right wheel speed“, “Rear left wheel speed“, and “Rear right wheel speed“.



**NOTE:**  
**Set the “Data monitor” recording speed to “10 msec”.**

7. Read a value (wheel speed) of all wheel sensor.



**NOTE:**  
**Vehicle must be driven after repair or replacement to erase the previous DTCs.**

Note the difference at 50 km/h (31 MPH) between the each wheel sensor and the maximum/minimum wheel speed detected by the each wheel sensor, is the difference within 5%, respectively?

YES>>

[GO TO 12.](#)

NO>>

## 12. PERFORM SELF-DIAGNOSIS (3)

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 With CONSULT

1. Stop the vehicle.
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 “C106A-04” detected?

YES>>

[GO TO 13.](#)

NO>>

INSPECTION END

## 13. CHECK TERMINAL

---

1. Disconnect 12V battery negative terminal.
2. Disconnect ABS actuator and electric unit (control unit) harness connector.
3. Check the ABS actuator and electric unit (control unit) terminals for damage or loose connection with harness connector.
4. Disconnect wheel sensor harness connector.
5. Check the wheel sensor terminals for damage or loose connection with harness connector.

Is the inspection result normal?

YES>>

[GO TO 16.](#)

NO>>

Repair / replace harness, connector, or terminal. [GO TO 14.](#)

## 14. CHECK DATA MONITOR (3)

---

 With CONSULT

1. Connect ABS actuator and electric unit (control unit) harness connector.
2. Connect wheel sensor harness connector.

3. Connect 12V battery negative terminal.
4. Erase self-diagnosis result for “ABS”.
5. Power switch OFF (Auto ACC function ON).
6. 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.**

7. Set the vehicle to READY.
8. Select “ABS” and “Data monitor”, check “Front left wheel speed”, “Front right wheel speed“, “Rear left wheel speed“, and “Rear right wheel speed“.



**NOTE:**  
**Set the “Data monitor” recording speed to “10 msec”.**

9. Read a value (wheel speed) of all wheel sensor.



**NOTE:**  
**Vehicle must be driven after repair or replacement to erase the previous DTCs.**

Note the difference at 50 km/h (31 MPH) between the each wheel sensor and the maximum/minimum wheel speed detected by the each wheel sensor, is the difference within 5%, respectively?

YES>>

[GO TO 15.](#)

NO>>

[GO TO 16.](#)

## 15. PERFORM SELF-DIAGNOSIS (4)

 With CONSULT

1. Stop the vehicle.
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 “C106A-04” detected?

YES>>

[GO TO 16.](#)

NO>>

INSPECTION END

## 16. CHECK WHEEL SENSOR HARNESS

1. Disconnect 12V battery negative terminal.
2. Disconnect ABS actuator and electric unit (control unit) harness connector.
3. Disconnect wheel sensor harness connector.
4. Check the continuity between ABS actuator and electric unit (control unit) harness connector and front wheel sensor harness connector.
  - o Measurement connector and terminal for power supply circuit

ABS actuator and electric unit (control unit)		Wheel sensor		Continuity	
Connector	Terminal	Connector	Terminal		
B2	24	B177	(Front left)	1	Existed
	21	E109	(Front right)		
	39	B178	(Rear left)		
	22	B180	(Rear right)		

- o Measurement connector and terminal for signal circuit

ABS actuator and electric unit (control unit)		Wheel sensor		Continuity	
Connector	Terminal	Connector	Terminal		
B2	7	B177	(Front left)	2	Existed
	26	E109	(Front right)		
	23	B178	(Rear left)		
	37	B180	(Rear right)		

5. Check the continuity between ABS actuator and electric unit (control unit) harness connector and the ground.

ABS actuator and electric unit (control unit)		—	Continuity
Connector	Terminal		
B2	24, 7	Ground	Not existed
	21, 26		
	39, 23		
	22, 37		

Is the inspection result normal?

YES>>

[GO TO 17.](#)

NO>>

Repair / replace harness or connector. [GO TO 17.](#)

## 17. CHECK DATA MONITOR (4)

---

 With CONSULT

1. Connect ABS actuator and electric unit (control unit) harness connector.
2. Connect wheel sensor harness connector.
3. Connect 12V battery negative terminal.
4. Erase self-diagnosis result for “ABS”.
5. Power switch OFF (Auto ACC function ON).
6. 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.**

7. Set the vehicle to READY.
8. Select “ABS” and “Data monitor”, check “Front left wheel speed”, “Front right wheel speed“, “Rear left wheel speed“, and “Rear right wheel speed“.



**NOTE:**  
**Set the “Data monitor” recording speed to “10 msec”.**

9. Read a value (wheel speed) of all wheel sensor.



**NOTE:**  
**Vehicle must be driven after repair or replacement to erase the previous DTCs.**

Note the difference at 50 km/h (31 MPH) between the each wheel sensor and the maximum/minimum wheel speed detected by the each wheel sensor, is the difference within 5%, respectively?

YES>>

[GO TO 18.](#)

NO>>

[GO TO 19.](#)

## 18. PERFORM SELF-DIAGNOSIS (5)

---

 With CONSULT

1. Stop the vehicle.
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 “C106A-04” detected?

YES>>

[GO TO 19.](#)

NO>>

INSPECTION END

## 19. REPLACE WHEEL SENSOR (2)

 With CONSULT

1. Replace the wheel sensor.

- Front: Refer to [FRONT WHEEL SENSOR : Removal & Installation.](#)
- Rear: Refer to [REAR WHEEL SENSOR : Removal & Installation.](#)

2. Erase self-diagnosis result for “ABS”.

3. Power switch OFF (Auto ACC function ON).

4. 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.**

5. Set the vehicle to READY.

6. Select “ABS” and “Data monitor”, check “Front left wheel speed”, “Front right wheel speed“, “Rear left wheel speed“, and “Rear right wheel speed“.

**NOTE:**

**Set the “Data monitor” recording speed to “10 msec”.**

7. Read a value (wheel speed) of all wheel sensor.

**NOTE:**

**Vehicle must be driven after repair or replacement to erase the previous DTCs.**

Note the difference at 50 km/h (31 MPH) between the each wheel sensor and the maximum/minimum wheel speed detected by the each wheel sensor, is the difference within 5%, respectively?

YES>>

[GO TO 20.](#)

NO>>

[GO TO 21.](#)

## 20. PERFORM SELF-DIAGNOSIS (6)

 With CONSULT

1. Stop the vehicle.
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 “C106A-04” detected?

YES>>

[GO TO 21.](#)

NO>>

INSPECTION END

## 21. REPLACE SENSOR ROTOR

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 With CONSULT

1. Replace the sensor rotor.
  - Front: Refer to [FRONT SENSOR ROTOR : Removal & Installation.](#)
  - Rear: Refer to [REAR SENSOR ROTOR : Removal & Installation.](#)
2. Erase self-diagnosis result for “ABS”.
3. Power switch OFF (Auto ACC function ON).
4. 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.**

5. Set the vehicle to READY.
6. Drive the vehicle at approximately 50 km/h (31 MPH) or more for approximately 2 minutes.



**NOTE:**  
**Vehicle must be driven after repair or replacement to erase the previous DTCs.**

7. Stop the vehicle.
8. Power switch OFF (Auto ACC function ON).
9. 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.**

10. Power switch ON without depressing the brake pedal.

**CAUTION:**

**Never set the vehicle to READY.**

11. Perform self-diagnosis for “ABS”.

Is DTC “C106A-04” detected?

YES>>

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

NO>>

INSPECTION END

Sample

## DTC DETECTION LOGIC

DTC No.		CONSULT screen terms	DTC detection condition		
C106A	55	Wheel sensor	1	Diagnosis condition	<ul style="list-style-type: none"> <li>Power switch is ON.</li> <li>When front left wheel sensor power supply voltage is normal.</li> <li>When the vehicle speed is 10 km/h (6.2 MPH) – 60 km/h (37 MPH).</li> </ul>
				Signal (terminal)	Front left wheel sensor signal
				Threshold	When a malfunction is detected in front left wheel sensor.
				Diagnosis delay time	1 second or less
			2	Diagnosis condition	<ul style="list-style-type: none"> <li>Power switch is ON.</li> <li>When front right wheel sensor power supply voltage is normal.</li> <li>When the vehicle speed is 10 km/h (6.2 MPH) – 60 km/h (37 MPH).</li> </ul>
				Signal (terminal)	Front right wheel sensor signal
				Threshold	When a malfunction is detected in front right wheel sensor.
				Diagnosis delay time	1 second or less
			3	Diagnosis condition	<ul style="list-style-type: none"> <li>Power switch is ON.</li> <li>When rear left wheel sensor power supply voltage is normal.</li> <li>When the vehicle speed is 10 km/h (6.2 MPH) – 60 km/h (37 MPH).</li> </ul>
				Signal (terminal)	Rear left wheel sensor signal
				Threshold	When a malfunction is detected in rear left wheel sensor.
				Diagnosis delay time	1 second or less
			4	Diagnosis condition	<ul style="list-style-type: none"> <li>Power switch is ON.</li> <li>When rear right wheel sensor power supply voltage is normal.</li> <li>When the vehicle speed is 10 km/h (6.2 MPH) – 60 km/h (37 MPH).</li> </ul>
				Signal (terminal)	Rear right wheel sensor signal
				Threshold	When a malfunction is detected in rear right wheel sensor.
				Diagnosis delay	1 second or less