

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

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### **1. PRECONDITIONING**

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.

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#### <u>GO TO 2</u>

### 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 "C106C-64" 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. STOP LAMP SWITCH SYSTEM**

Check the stop lamp switch system. Refer to Component Function Check.

Is the inspection result normal?

YES>>

<u>GO TO 2</u>.

NO>>

Repair or replace stop lamp switch system.

### 2. CHECK BRAKE FLUID LEAKAGE

Check the brake fluid leakage. Refer to <u>BRAKE FLUID : Inspection</u>.

Is the inspection result normal?

YES>>

<u>GO TO 3</u>.

NO>>

Repair or replace brake fluid leakage part.

### **3. CHECK BRAKE PIPING**

Check the brake piping.

- Front: Refer to FRONT BRAKE PIPING : Inspection.
- Rear: Refer to <u>REAR BRAKE PIPING</u> : Inspection.

Is the inspection result normal?

YES>>

<u>GO TO 4</u>.

NO>>

Repair or replace error-detected brake piping.

- Front: Refer to <u>REAR BRAKE PIPING : Inspection</u>.
- Rear: Refer to <u>REAR BRAKE PIPING</u> : Removal & Installation.

### 4. CHECK BRAKE PEDAL

Check the brake pedal.

- Brake pedal height: Refer to <u>BRAKE PEDAL : Periodic Maintenance Operation</u>.
- Brake pedal assembly: Refer to **BRAKE PEDAL** : Inspection and Adjustment.

Is the inspection result normal?

#### <u>GO TO 5</u>.

NO>>

Adjust the brake pedal height or replace brake pedal assembly.

- Adjust the brake pedal: Refer to **BRAKE PEDAL** : Periodic Maintenance Operation.
- Replace the brake pedal: Refer to <u>BRAKE PEDAL</u> : <u>Removal & Installation</u>.

### 5. CHECK ELECTRICALLY-DRIVEN INTELLIGENT BRAKE UNIT

Check the electrically-driven intelligent brake unit. Refer to <u>ELECTRICALLY-DRIVEN INTELLIGENT BRAKE UNIT :</u> <u>Inspection</u>.

Is the inspection result normal?

YES>>

<u>GO TO 6</u>.

NO>>

Repair or replace electrically-driven intelligent brake unit. Refer to <u>ELECTRICALLY-DRIVEN INTELLIGENT BRAKE UNIT</u> : <u>Removal & Installation</u>.

### 6. CHECK FRONT DISC BRAKE

Check the front disc brake. Refer to FRONT BRAKE CALIPER ASSEMBLY : Inspection.

Is the inspection result normal?

YES>>

<u>GO TO 7</u>.

NO>>

Repair or replace front disc brake. Refer to FRONT BRAKE CALIPER ASSEMBLY : Removal & Installation.

### 7. CHECK REAR DISC BRAKE

Check the rear disc brake. Refer to REAR BRAKE CALIPER ASSEMBLY : Inspection.

Is the inspection result normal?

YES>>

<u>GO TO 8</u>.

NO>>

Repair or replace rear disc brake. Refer to REAR BRAKE CALIPER ASSEMBLY : Removal & Installation.

## 8. CHECK ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) POWER SUPPLY AND GROUND CIRCUIT

Check the ABS actuator and electric unit (control unit) power supply and ground circuit. Refer to Diagnosis Procedure.

Is the inspection result normal?

YES>>

GO TO 9.

NO>>

Repair / replace harness, connector, terminal, fuse, or fusible link.

### 9. PERFORM SELF-DIAGNOSIS

#### With CONSULT

- 1. Erase self-diagnosis result for "ABS".
- 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. Set the vehicle to READY, and drive the vehicle at approximately 50 km/h (31 MPH) or more for approximately 2 minutes.

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

- 5. Stop the vehicle.
- 6. Power switch OFF (Auto ACC function ON).
- 7. 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.

8. Power switch ON without depressing the brake pedal.

CAUTION: Never set the vehicle to READY.

9. Perform self-diagnosis for "ABS".

#### Is DTC "C106C-64" detected?

#### YES>>

Replace the ABS actuator and electric unit (control unit). Refer to <u>ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)</u>: <u>Removal & Installation</u>.

#### NO>>

Check the ABS actuator and electric unit (control unit) harness connector and terminal for damage, looseness and disconnection. Repair / replace harness, connector, or terminal.

### **DTC DETECTION LOGIC**

| DTC No. |    | CONSULT screen terms | DTC detection condition |  |
|---------|----|----------------------|-------------------------|--|
| C1072   | 01 | Yaw rate sensor      | Diagnosis condition     | <ul><li>Power switch is ON.</li><li>When the power supply voltage is normal.</li></ul> |
|         |    |                      | Signal (terminal)       | —  |
|         |    |                      | Threshold               | When a malfunction is detected in yaw rate sensor.                                     |
|         |    |                      | Diagnosis delay time    | 1 second or less   |

### **POSSIBLE CAUSE**



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  |
|---|---|
| • Change in vehicle posture (e.g. different tire sizes on front and rear, overloaded) | • Change in vehicle posture (e.g. different tire sizes on front and rear, overloaded) |
| • ABS actuator and electric unit (control unit) install angle is improper             | • ABS actuator and electric unit (control unit) install angle is improper             |
| Harness or connector  | • Harness or connector  |
| • ABS actuator and electric unit (control unit)                                       | • ABS actuator and electric unit (control unit)                                       |
| • ABS actuator and electric unit (control unit) power supply system                   | • ABS actuator and electric unit (control unit) power supply system                   |
| • Fuse  | • Fuse  |
| Fusible link  | • Fusible link  |
| • 12V battery   | • 12V battery   |

### 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

### **1. PRECONDITIONING**

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.

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#### <u>GO TO 2</u>

### 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 "C1072-01" 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. CHECK SELF-DIAGNOSIS RESULTS

#### (B) With CONSULT

Replace the ABS actuator and electric unit (control unit) even if other DTCs are displayed along with "C1072-01" in self-diagnosis for "ABS".

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Replace the ABS actuator and electric unit (control unit). Refer to <u>ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)</u>: <u>Removal & Installation</u>.

### **DTC DETECTION LOGIC**

| DTC No. |    | CONSULT screen terms | DTC detection condition |  |
|---------|----|----------------------|-------------------------|--|
| C1072   | 64 | Yaw rate sensor      | Diagnosis condition     | <ul><li>Power switch is ON.</li><li>When the power supply voltage is normal.</li></ul> |
|         |    |                      | Signal (terminal)       | —  |
|         |    |                      | Threshold               | When a malfunction is detected in yaw rate sensor.                                     |
|         |    |                      | Diagnosis delay time    | 1 second or less   |

### **POSSIBLE CAUSE**



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  |
|---|---|
| • Change in vehicle posture (e.g. different tire sizes on front and rear, overloaded) | • Change in vehicle posture (e.g. different tire sizes on front and rear, overloaded) |
| • ABS actuator and electric unit (control unit) install angle is improper             | • ABS actuator and electric unit (control unit) install angle is improper             |
| Harness or connector  | • Harness or connector  |
| • ABS actuator and electric unit (control unit)                                       | • ABS actuator and electric unit (control unit)                                       |
| • ABS actuator and electric unit (control unit) power supply system                   | • ABS actuator and electric unit (control unit) power supply system                   |
| • Fuse  | • Fuse  |
| Fusible link  | • Fusible link  |
| • 12V battery   | • 12V battery   |

### FAIL-SAFE

The following functions are suspended.

- VDC function
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### 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 "C1072-64" 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