

# 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.

2001 NISSAN Micra 5 Doors OEM Service and Repair Workshop Manual

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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-64" detected?

YES>>

GO TO 21.

NO>>

INSPECTION END

#### 21. REPLACE SENSOR ROTOR

**(II)**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.



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-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>>

INSPECTION END



### DTC DETECTION LOGIC

| DTC No. CONSULT screen terms |              |   | DTC detection condition |   |  |
|------------------------------|--------------|---|-------------------------|---|--|
| C106A 95                     | Wheel sensor | 1 | Diagnosis<br>condition  | <ul> <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<br>time | 1 second or less  |  |
|                              |              | 2 | Diagnosis<br>condition  | <ul> <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<br>time | 1 second or less  |  |
|                              |              | 3 | Diagnosis<br>condition  | <ul> <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<br>time | 1 second or less  |  |
|                              |              | 4 | Diagnosis<br>condition  | <ul> <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  |  |

| DTC No. | CONSULT screen<br>terms | DTC detection condition |  |  |
|---------|-------------------------|-------------------------|--|--|
|         |                         | time                    |  |  |

#### **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  |
|---|---|
|   | Vehicle was not driven after previous repair                      |
| Harness or connector  | Harness or connector  |
|   | Front left wheel sensor   |
| Front left wheel sensor   | Front left wheel sensor   |
| Front left sensor rotor   | Front left sensor rotor   |
| Front left tire size  | Front left tire size  |
| Front right wheel sensor  | Front right wheel sensor  |
| Front right sensor rotor  | Front right sensor rotor  |
| Front right tire size   | Front right tire size   |
| Rear left wheel sensor  | Rear left wheel sensor  |
| Rear left sensor rotor  | Rear left sensor rotor  |
| Rear left tire size   | Rear left tire size   |
| Rear right wheel sensor   | Rear right wheel sensor   |
| Rear right sensor rotor   | Rear right sensor rotor   |
| Rear right tire size  | Rear right tire size  |
| ABS actuator and electric unit (control unit) power  outputs existent | ABS actuator and electric unit (control unit)                     |
| <ul><li>• Fuse</li></ul>  | ABS actuator and electric unit (control unit) power supply system |
| Fusible link  | • Fuse  |
| • 12V battery   | Fusible link  |
|   | • 12V battery   |

#### **FAIL-SAFE**

The following functions are suspended.

- VDC function
- TCS function
- ABS function
- EBD function

- hill start assist function
- Brake limited slip differential (BLSD) function
- Brake assist function
- Brake force distribution function
- Cooperative regenerative brake function
- Electric parking 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.

>>

#### **GO TO 2**

#### 2. CHECK DTC DETECTION

#### **(II)**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 "C106A-95" 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

#### **CAUTION:**

Never check between wheel sensor harness connector terminals.

#### 1. CHECK TIRE

Check the tire air pressure, wear and size. Refer to TIRE AIR PRESSURE: Service Data.

Is the inspection result normal?

YES>>

**GO TO 6**.

NO>>

Adjust air pressure or replace tire. GO TO 2.

#### 2. CHECK DATA MONITOR (1)



- 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.
- 5. Select "ABS" and "Data monitor", check "Front left wheel speed", "Front right wheel speed", "Rear left wheel speed", and "Rear right wheel speed".



Set the "Data monitor" recording speed to "10 msec".

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



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 3.

NO>>

GO TO 4.

#### 3. PERFORM SELF-DIAGNOSIS (1)

- **(H)**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-95" detected?

YES>>

GO TO 4.

NO>>

INSPECTION END

## 4. 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 5.

NO>>

Repair / replace harness, connector, terminal, fuse, or fusible link. GO TO 6.

#### 5. CHECK WHEEL SENSOR AND SENSOR ROTOR

- 1. Disconnect 12V battery negative terminal.
- 2. Disconnect wheel sensor harness connector.
- 3. Remove dust and foreign matter adhered to the each wheel sensor and each sensor rotor with a vacuum dust collector through the each wheel sensor mounting hole.

#### **CAUTION:**

Install wheel sensor with no backlash and float, and tighten the mounting bolt to the specified torque.

- Front: Refer to FRONT WHEEL SENSOR: Exploded View.
- Rear: Refer to REAR WHEEL SENSOR: Exploded View.

**GO TO 6**.

#### 6. CHECK WHEEL SENSOR

Check the wheel sensor for damage.

<u>Is the inspection result normal?</u>

YES>>

GO TO 10.

NO>>

GO TO 7.

#### 7. CHECK WHEEL SENSOR OUTPUT SIGNAL

- 1. Disconnect 12V battery negative terminal.
- 2. Disconnect ABS actuator and electric unit (control unit) harness connector.
- 3. Disconnect wheel sensor harness connector.
- 4. Connect ABS active wheel sensor tester (SST: J-45741-A) to wheel sensor using appropriate adapter.
- 5. Turn the ABS active wheel sensor tester power switch ON.



The green POWER indicator should illuminate. If the POWER indicator does not illuminate, replace the battery in the ABS active wheel sensor tester before proceeding.

6. Spin the wheel of the vehicle by hand and observe the red SENSOR indicator on the ABS active wheel sensor tester. The red SENSOR indicator should flash ON and OFF to indicate an output signal.



If the red SENSOR indicator illuminates but does not flash, reverse the polarity of the tester leads and retest.

Does the ABS active wheel sensor tester detect a signal?

YES>>

Replace the ABS actuator and electric unit (control unit). Refer to Removal and Installation.

NO>>

GO TO 8.

#### 8. REPLACE WHEEL SENSOR (1)

**(H)**With CONSULT

- 1. Replace the wheel sensor.
  - Front: Refer to FRONT WHEEL SENSOR: Removal & Installation.
  - Rear: Refer to REAR WHEEL SENSOR: Removal & Installation.
- 2. Connect 12V battery negative terminal.