DTC Description

SIEMD-4660290

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition		
C1107	FR RH SENSOR-2 (Front RH wheel sensor-2)	1	Diagnosis condition	• When ignition switch is ON. • When the power supply voltage of front RH wheel sensor is normal. • When the vehicle speed is 10 km/h (6.2 MPH) – 60 km/h (37 MPH).
			Signal (terminal)	—
			Threshold	When power supply voltage of front RH wheel sensor is low.
			Diagnosis delay time	1 – 60 seconds or more
		2	Diagnosis condition	• When ignition switch is ON. • When the power supply voltage of front RH wheel sensor is normal. • When the vehicle speed is 10 km/h (6.2 MPH) – 60 km/h (37 MPH).
			Signal (terminal)	—
			Threshold	When distance between front RH wheel sensor and front RH wheel sensor rotor is large.
			Diagnosis delay time	1 – 60 seconds or more
		3	Diagnosis condition	• When ignition switch is ON. • When the power supply voltage of front RH wheel sensor is normal. • When the vehicle speed is 10 km/h (6.2 MPH) – 60 km/h (37 MPH).
			Signal (terminal)	—
			Threshold	When installation of front RH wheel sensor or front RH wheel sensor rotor is not normal.
			Diagnosis delay time	1 – 60 seconds or more
		4	Diagnosis condition	• When ignition switch is ON. • When the power supply voltage of front RH wheel sensor is normal. • When the vehicle speed is 10 km/h (6.2 MPH) – 60 km/h (37 MPH).
			Signal (terminal)	—
			Threshold	When there is contamination on or damage to the front RH wheel sensor or front RH sensor rotor.
			Diagnosis delay time	1 – 60 seconds or more

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
• Harness or connector • Front RH wheel sensor • Front RH sensor rotor • Front RH tire size • ABS actuator and electric unit (control unit) power supply system • Fuse • Fusible link • 12V battery	• Harness or connector • Front RH wheel sensor • Front RH sensor rotor • ABS actuator and electric unit (control unit) • Front RH tire size • ABS actuator and electric unit (control unit) power supply system • Fuse • Fusible link • 12V battery • Vehicle was not driven after previous repair

FAIL-SAFE

The following functions are suspended.

- VDC function
- TCS function
- ABS function
- EBD function (only when both 2 rear wheels are malfunctioning)
- Brake limited slip differential (BLSD) function
- Brake assist function
- Brake force distribution function
- hill start assist function
- Intelligent trace control function (control of chassis control module)
- Active ride control function (control of chassis control module)
- Automatic brake hold function (control of chassis control module)

1. PRECONDITIONING

If “Confirmation Procedure” has been previously conducted, always turn the ignition switch OFF and wait at least 10 seconds before conducting the next test.

>>

GO TO 2.

2. CHECK DTC DETECTION

With CONSULT

1. Start the engine.
2. Drive the vehicle at approximately 50 km/h (31 MPH) or more for approximately 2 minutes.
3. Stop the vehicle.
4. Turn the ignition switch OFF.

NOTE:
Wait at least 10 seconds after turning ignition switch OFF.

5. Start the engine.

NOTE:
Wait at least 10 seconds after start the engine.

6. Perform self-diagnosis for “ABS”.

Is DTC “C1107” detected?

YES>>

“CRNT” is displayed: Refer to DTC Diagnosis Procedure.

YES>>

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

NO>>

To check malfunction symptom before repair: Refer to Inspection.

NO>>

Confirmation after repair: INSPECTION END

DTC Diagnosis Procedure

SIEMD-3533616

CAUTION:
Never check between wheel sensor harness connector terminals.

1. CHECK WHEEL HUB ASSEMBLY

Check that there is no excessive looseness in front RH wheel hub assembly. Refer to FRONT WHEEL HUB AND KNUCKLE : Periodic Maintenance Operation.

Is the inspection result normal?

YES>>

GO TO 2 .

NO>>

Repair or replace the front RH wheel hub assembly. Refer to FRONT WHEEL HUB AND KNUCKLE : Removal & Installation.GO TO 2 .

2. 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 3 .

NO>>

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

3. CHECK TIRE

1. Turn the ignition switch OFF.
2. Check the front RH 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, and GO TO 4 .

4. CHECK DATA MONITOR (1)

With CONSULT

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

2. Turn the ignition switch OFF → ON → OFF.

NOTE:
Wait at least 10 seconds after turning ignition switch OFF or ON.

3. Start the engine.

4. Select “ABS” and “DATA MONITOR”, check “FR LH SENSOR”, “FR RH SENSOR”, “RR LH SENSOR” and “RR RH SENSOR”.

NOTE:
Set the “DATA MONITOR” recording speed to “10 msec”.

5. 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 wheel speed detected by front RH wheel sensor and the maximum/minimum wheel speed detected by other front RH wheel sensor, is the difference within 5%, respectively?

YES>>

GO TO 5 .

NO>>

GO TO 6 .

5. PERFORM SELF-DIAGNOSIS (1)

With CONSULT

1. Stop the vehicle.

2. Turn the ignition switch OFF.

NOTE:
Wait at least 10 seconds after turning ignition switch OFF.

3. Start the engine.

NOTE:
Wait at least 10 seconds after start the engine.

4. Perform self-diagnosis for “ABS”.

Is DTC “C1107” detected?

YES>>

GO TO 6 .

NO>>

INSPECTION END

6. CHECK WHEEL SENSOR AND SENSOR ROTOR

1. Turn the ignition switch OFF.
2. Disconnect front RH wheel sensor harness connector.
3. Remove dust and foreign matter adhered to the front RH wheel sensor and front RH sensor rotor with a vacuum dust collector through the wheel sensor mounting hole.

CAUTION:
Install front RH wheel sensor with no backlash and float, and tighten the mounting bolt to the specified torque. Refer to FRONT WHEEL SENSOR : Exploded View.

>>

GO TO 7 .

7. CHECK WHEEL SENSOR

Check the front RH wheel sensor for damage.

Is the inspection result normal?

YES>>

GO TO 8 .

NO>>

GO TO 9 .

8. CHECK WHEEL SENSOR OUTPUT SIGNAL

1. Disconnect ABS actuator and electric unit (control unit) harness connector.
2. Connect ABS active wheel sensor tester (SST: J-45741-A) to front RH wheel sensor using appropriate adapter.
3. Turn the ABS active wheel sensor tester power switch ON.

NOTE:
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.

4. 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.

NOTE:
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>>

GO TO 12 .

NO>>

GO TO 9 .

9. REPLACE WHEEL SENSOR (1)

With CONSULT

1. Replace the front RH wheel sensor. Refer to FRONT WHEEL SENSOR : Removal & Installation.
2. Connect ABS actuator and electric unit (control unit) harness connector.
3. Erase self-diagnosis result for “ABS”.
4. Turn the ignition switch OFF → ON → OFF.

NOTE:
Wait at least 10 seconds after turning ignition switch OFF or ON.

5. Start the engine.
6. Select “ABS” and “DATA MONITOR”, check “FR LH SENSOR”, “FR RH SENSOR”, “RR LH SENSOR” and “RR RH SENSOR”.

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 wheel speed detected by front RH wheel sensor and the maximum/minimum wheel speed detected by other front RH wheel sensor, is the difference within 5%, respectively?

YES>>

GO TO 10 .

NO>>

GO TO 20 .

10. PERFORM SELF-DIAGNOSIS (2)

With CONSULT

1. Stop the vehicle.
2. Turn the ignition switch OFF.

NOTE:

Wait at least 10 seconds after turning ignition switch OFF.

3. Start the engine.

NOTE:
Wait at least 10 seconds after start the engine.

4. Perform self-diagnosis for “ABS”.

Is DTC “C1107” detected?

YES>>

GO TO 11 .

NO>>

INSPECTION END

11. CHECK CONNECTOR

1. Turn the ignition switch OFF.
2. Check the ABS actuator and electric unit (control unit) harness connector for disconnection or looseness.
3. Check the front RH wheel sensor harness connector for disconnection or looseness.

Is the inspection result normal?

YES>>

GO TO 14 .

NO>>

Repair / replace harness or connector, securely lock the connector, and GO TO 12 .

12. CHECK DATA MONITOR (2)

With CONSULT

1. Erase self-diagnosis result for “ABS”.
2. Turn the ignition switch OFF → ON → OFF.

NOTE:
Wait at least 10 seconds after turning ignition switch OFF or ON.

3. Start the engine.
4. Select “ABS” and “DATA MONITOR”, check “FR LH SENSOR”, “FR RH SENSOR”, “RR LH SENSOR” and “RR RH SENSOR”.

NOTE:

Set the “DATA MONITOR” recording speed to “10 msec”.

5. 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 wheel speed detected by front RH wheel sensor and the maximum/minimum wheel speed detected by other front RH wheel sensor, is the difference within 5%, respectively?

YES>>

GO TO 13 .

NO>>

GO TO 14 .

13. PERFORM SELF-DIAGNOSIS (3)

With CONSULT

1. Stop the vehicle.
2. Turn the ignition switch OFF.

NOTE:
Wait at least 10 seconds after turning ignition switch OFF.

3. Start the engine.

NOTE:
Wait at least 10 seconds after start the engine.

4. Perform self-diagnosis for “ABS”.

Is DTC “C1107” detected?

YES>>

GO TO 14 .

NO>>

INSPECTION END

14. CHECK TERMINAL

1. Turn the ignition switch OFF.
2. Disconnect ABS actuator and electric unit (control unit) harness connector and then check the ABS actuator and electric unit (control unit) terminals for damage or loose connection with harness connector.
3. Disconnect front RH wheel sensor harness connector and check front RH wheel sensor terminals for damage or loose connection with harness connector.

Is the inspection result normal?

YES>>

GO TO 17 .

NO>>

Repair / replace harness, connector, or terminal, and GO TO 15 .

15. CHECK DATA MONITOR (3)

With CONSULT

1. Connect ABS actuator and electric unit (control unit) harness connector.
2. Connect front RH wheel sensor harness connector.
3. Erase self-diagnosis result for “ABS”.
4. Turn the ignition switch OFF → ON → OFF.

NOTE:
Wait at least 10 seconds after turning ignition switch OFF or ON.

5. Start the engine.
6. Select “ABS” and “DATA MONITOR”, check “FR LH SENSOR”, “FR RH SENSOR”, “RR LH SENSOR” and “RR RH SENSOR”.

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 wheel speed detected by front RH wheel sensor and the maximum/minimum wheel speed detected by other front RH wheel sensor, is the difference within 5%, respectively?

YES>>

GO TO 16 .

NO>>

GO TO 17 .

16. PERFORM SELF-DIAGNOSIS (4)

With CONSULT

1. Stop the vehicle.
2. Turn the ignition switch OFF.

NOTE:
Wait at least 10 seconds after turning ignition switch OFF.

3. Start the engine.

NOTE:
Wait at least 10 seconds after start the engine.

4. Perform self-diagnosis for “ABS”.

Is DTC “C1107” detected?

YES>>

GO TO 17 .

NO>>

INSPECTION END

17. CHECK WHEEL SENSOR HARNESS

1. Turn the ignition switch OFF.
2. Disconnect ABS actuator and electric unit (control unit) harness connector.
3. Disconnect front RH wheel sensor harness connector.
4. 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		
E35	4, 16	Ground	Not existed

Is the inspection result normal?

YES>>

GO TO 18 .

NO>>

Repair / replace harness or connector, and GO TO 18 .

18. CHECK DATA MONITOR (4)

With CONSULT

1. Connect ABS actuator and electric unit (control unit) harness connector.
2. Connect front RH wheel sensor harness connector.
3. Erase self-diagnosis result for “ABS”.
4. Turn the ignition switch OFF → ON → OFF.

NOTE:
Wait at least 10 seconds after turning ignition switch OFF or ON.

5. Start the engine.
6. Select “ABS” and “DATA MONITOR”, check “FR LH SENSOR”, “FR RH SENSOR”, “RR LH SENSOR” and “RR RH SENSOR”.

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 wheel speed detected by front RH wheel sensor and the maximum/minimum wheel speed detected by other front RH wheel sensor, is the difference within 5%, respectively?

YES>>

GO TO 19 .

NO>>

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

19. PERFORM SELF-DIAGNOSIS (5)

With CONSULT

1. Stop the vehicle.
2. Turn the ignition switch OFF.

NOTE:
Wait at least 10 seconds after turning ignition switch OFF.

3. Start the engine.

NOTE:
Wait at least 10 seconds after start the engine.

4. Perform self-diagnosis for “ABS”.

Is DTC “C1107” 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

20. REPLACE SENSOR ROTOR

With CONSULT

1. Replace the front RH sensor rotor.Refer to FRONT SENSOR ROTOR : Removal & Installation.
2. Erase self-diagnosis result for “ABS”.
3. Turn the ignition switch OFF → ON → OFF.

NOTE:
Wait at least 10 seconds after turning ignition switch OFF or ON.

4. Start the engine.
5. 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.

6. Stop the vehicle.
7. Turn the ignition switch OFF.

NOTE:
Wait at least 10 seconds after turning ignition switch OFF.

8. Start the engine.

NOTE:
Wait at least 10 seconds after start the engine.

9. Perform self-diagnosis for “ABS”.

Is DTC “C1107” 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

Inspection

SIEMD-15616165516620

DESCRIPTION

Sometimes the symptom is not present when the vehicle is brought in for service. If possible, re-create the conditions present at the time of the incident. Doing so may help avoid a No Trouble Found Diagnosis. The following section illustrates ways to simulate the conditions/environment under which the owner experiences an electrical incident.

The section is broken into the six following topics:

- Vehicle vibration
- Heat sensitive
- Freezing
- Water intrusion
- Electrical load
- Cold or hot start up

Get a thorough description of the incident from the customer. It is important for simulating the conditions of the problem.

VEHICLE VIBRATION

The problem may occur or become worse while driving on a rough road or when engine is vibrating (idle with A/C on). In such a case, you will want to check for a vibration related condition. Refer to the following illustration.

Connector & Harness

Determine which connectors and wiring harness would affect the electrical system you are inspecting. Gently shake each connector and harness while monitoring the system for the incident you are trying to duplicate. This test may indicate a loose or poor electrical connection.

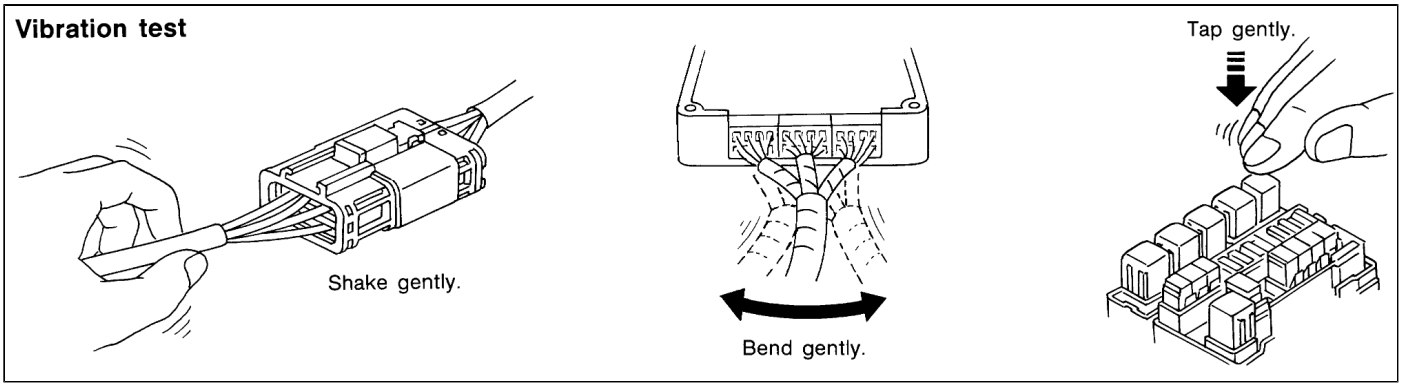
Hint

Connectors can be exposed to moisture. It is possible to get a thin film of corrosion on the connector terminals. A visual inspection may not reveal this without disconnecting the connector. If the problem occurs intermittently, perhaps the problem is caused by corrosion. It is a good idea to disconnect, inspect and clean the terminals on related connectors in the system.

Sensor & Relay

Gently apply a slight vibration to sensors and relays in the system you are inspecting.

This test may indicate a loose or poorly mounted sensor or relay.



-01-GI839

Engine Compartment

There are several reasons a vehicle or engine vibration could cause an electrical complaint. Some of the things to check for are:

- Connectors not fully seated.
- Wiring harness not long enough and is being stressed due to engine vibrations or rocking.
- Wires laying across brackets or moving components.
- Loose, dirty or corroded ground wires.
- Wires routed too close to hot components.

To inspect components under the hood, start by verifying the integrity of ground connections. (Refer to Ground Inspection described later.) First check that the system is properly grounded. Then check for loose connection by gently shaking the wiring or components as previously explained. Using the wiring diagrams inspect the wiring for continuity.

Behind the Instrument Panel

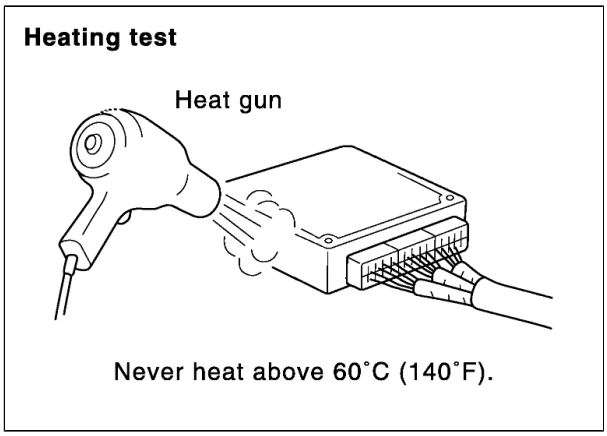
An improperly routed or improperly clamped harness can become pinched during accessory installation. Vehicle vibration can aggravate a harness which is routed along a bracket or near a screw.

Under Seating Areas

An unclamped or loose harness can cause wiring to be pinched by seat components (such as slide guides) during vehicle vibration. If the wiring runs under seating areas, inspect wire routing for possible damage or pinching.

HEAT SENSITIVE

- The customer's concern may occur during hot weather or after car has sat for a short time. In such cases you will want to check for a heat sensitive condition.



-02-PAIA0733GB

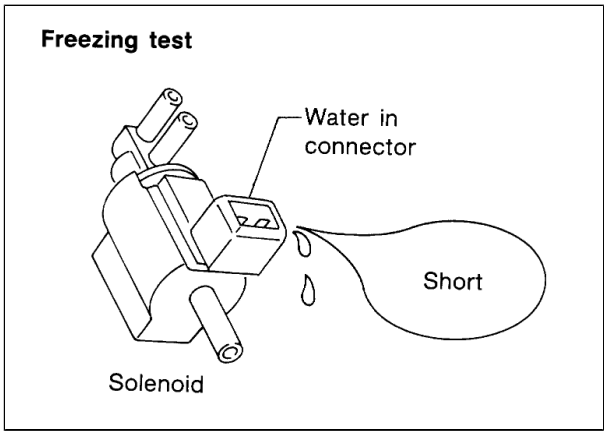
- To determine if an electrical component is heat sensitive, heat the component with a heat gun or equivalent.

CAUTION:
Never heat components above 60°C (140°F).

- If incident occurs while heating the unit, either replace or properly insulate the component.

FREEZING

- The customer may indicate the incident goes away after the car warms up (winter time). The cause could be related to water freezing somewhere in the wiring/electrical system.



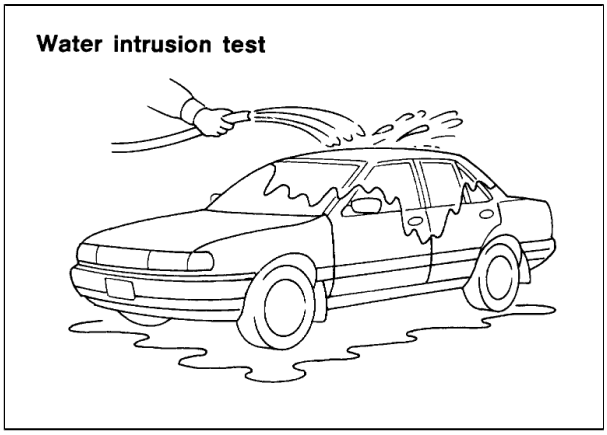
-03-GI843

- There are two methods to check for this. The first is to arrange for the owner to leave his car overnight. Check it will get cold enough to demonstrate his complaint. Leave the car parked outside overnight. In the morning, do a quick and thorough diagnosis of those electrical components which could be affected.

- The second method is to put the suspect component into a freezer long enough for any water to freeze. Reinstall the part into the car and check for the reoccurrence of the incident. If it occurs, repair or replace the component.

WATER INTRUSION

The incident may occur only during high humidity or in rainy/snowy weather. In such cases the incident could be caused by water intrusion on an electrical part. This can be simulated by soaking the car or running it through a car wash.

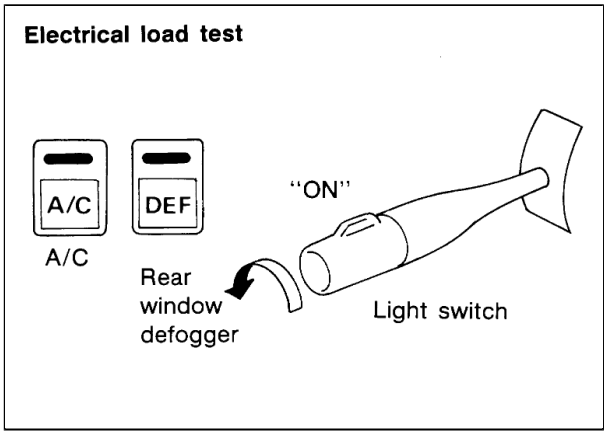


-04-GI844

CAUTION:
Never spray water directly on any electrical components.

ELECTRICAL LOAD

The incident may be electrical load sensitive. Perform diagnosis with all accessories (including A/C, rear window defogger, radio, fog lamps) turned on.



-05-GI845

COLD OR HOT START UP

On some occasions an electrical incident may occur only when the car is started cold, or it may occur when the car is restarted hot shortly after being turned off. In these cases you may have to keep the car overnight to make a proper diagnosis.

FRONT WHEEL HUB AND KNUCKLE : Periodic Maintenance Operation

NIS0000000015229785

COMPONENT PART

Make sure that the mounting conditions (looseness, backlash) of each component and component conditions (wear, damage) are normal.

WHEEL HUB ASSEMBLY (BEARING-INTEGRATED TYPE)

Check the following items, and replace the part if necessary.

- Move wheel hub and bearing assembly in the axial direction by hand. Check there is no looseness of wheel bearing.

  Axial end play : Refer to WHEEL BEARING : Service Data.

- Rotate wheel hub and make sure there is no unusual noise or other irregular conditions. If there is any of irregular conditions, replace wheel hub and bearing assembly.

Diagnosis Procedure

NIS0000000015227165

1. CHECK ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) ACCESSORY POWER SUPPLY (1)

1. Turn the ignition switch OFF.
2. Get out of the vehicle and close driver's door.
3. Wait for 3 minutes or more.

CAUTION:
Never operate vehicle (door lock, open/close the door, etc,) while waiting. It causes an accessory power supply by auto ACC function.

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

+		—	Voltage
ABS actuator and electric unit (control unit)			
Connector	**Terminal**		
E35	28	Ground	Approx. 0 V

6. Turn the ignition switch ON.

CAUTION:
Never start engine.

7. Check the voltage between ABS actuator and electric unit (control unit) harness connector and ground.

+		—	Voltage
ABS actuator and electric unit (control unit)			
Connector	**Terminal**		
E35	28	Ground	10 – 16 V

Is the inspection result normal?

YES>>

GO TO 3.

NO>>

GO TO 2.

2. CHECK ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) ACCESSORY POWER SUPPLY CIRCUIT

1. Turn the ignition switch OFF.
2. Get out of the vehicle and close driver's door.

3. Wait for 3 minutes or more.

CAUTION:
Never operate vehicle (door lock, open/close the door, etc,) while waiting. It causes an accessory power supply by auto ACC function.

4. Check the 10 A fuse (#21).

5. Check the continuity and short circuit between ABS actuator and electric unit (control unit) harness connector terminal (28) and 10 A fuse (#21).

Is the inspection result normal?

YES>>

Perform trouble diagnosis for ignition power supply.

NO>>

Repair / replace harness, connector, or fuse.

3. CHECK ABS MOTOR AND ABS MOTOR RELAY POWER SUPPLY

1. Turn the ignition switch OFF.

2. Check the voltage between ABS actuator and electric unit (control unit) harness connector and ground.

+		—	Voltage
ABS actuator and electric unit (control unit)			
Connector	**Terminal**		
E35	1	Ground	10 – 16 V

3. Turn the ignition switch ON.

CAUTION:
Never start engine.

4. Check the voltage between ABS actuator and electric unit (control unit) harness connector and ground.

+		—	Voltage
ABS actuator and electric unit (control unit)			
Connector	**Terminal**		
E35	1	Ground	10 – 16 V

Is the inspection result normal?

YES>>

GO TO 5.

NO>>

GO TO 4.

4. CHECK ABS MOTOR AND ABS MOTOR RELAY POWER SUPPLY CIRCUIT

1. Turn the ignition switch OFF.

2. Check the 40 A fusible link (#K).

3. Check the continuity and short circuit between ABS actuator and electric unit (control unit) harness connector terminal (1) and 40 A fusible link (#K).

Is the inspection result normal?

YES>>

Perform trouble diagnosis for 12V battery power supply.

NO>>

Repair / replace harness, connector, or fusible link.

5. CHECK ACTUATOR RELAY, ABS IN VALVE, ABS OUT VALVE, CUT VALVE AND SUCTION VALVE POWER SUPPLY

1. Turn the ignition switch OFF.

2. Check the voltage between ABS actuator and electric unit (control unit) harness connector and ground.

+		—	Voltage
ABS actuator and electric unit (control unit)			
Connector	**Terminal**		
E35	25	Ground	10 – 16 V

3. Turn the ignition switch ON.

CAUTION:
Never start engine.

4. Check the voltage between ABS actuator and electric unit (control unit) harness connector and ground.

+		—	Voltage
ABS actuator and electric unit (control unit)			
Connector	**Terminal**		
E35	25	Ground	10 – 16 V

Is the inspection result normal?

YES>>

GO TO 7.

NO>>

GO TO 6.

6. CHECK ACTUATOR RELAY, ABS IN VALVE, ABS OUT VALVE, CUT VALVE AND SUCTION VALVE POWER SUPPLY CIRCUIT

1. Turn the ignition switch OFF.

2. Check the 30 A fusible link (#G).

3. Check the continuity and short circuit between ABS actuator and electric unit (control unit) harness connector terminal (25) and 30 A fusible link (#G).

Is the inspection result normal?

YES>>

Perform trouble diagnosis for 12V battery power supply.

NO>>

Repair / replace harness, connector, or fusible link.

7. CHECK GROUND CIRCUIT

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		
E35	13	Ground	Existed
	38		

Is the inspection result normal?

YES>>

GO TO 8.

NO>>

Repair / replace harness, connector, or terminal.

8. CHECK TERMINAL

Check ABS actuator and electric unit (control unit) terminals for damage or loose connection with harness connector.

Is the inspection result normal?

YES>>

INSPECTION END

NO>>

Repair / replace harness, connector, or terminal.

TIRE AIR PRESSURE : Service Data

RDE-001354744

Unit: kPa (kgf/cm^2, psi)

Item	Standard	
	Front	Rear
215/65R16 98H	230 (2.3, 33)	230 (2.3, 33)
215/60R17 96H	230 (2.3, 33)	230 (2.3, 33)
225/45R19 92W	240 (2.4, 35)	240 (2.4, 35)
T145/90D16 106M (Emergency)	420 (4.2, 60)	420 (4.2, 60)
T135/90D16 102M (Emergency)	420 (4.2, 60)	420 (4.2, 60)

FRONT AXLE : Service Data

NIS0000000015229797

Axial end play	0.05 mm (0.002 in) or less