

# Your Ultimate Source for OEM Repair Manuals

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1994 NISSAN Skyline GT-R V-Spec (R32) OEM Service and Repair Workshop Manual

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# **DTC DETECTION LOGIC**

DTC No.		CONSULT screen terms	DTC detection condition		
	12	Backup power supply unit	Diagnosis condition	When power switch is ON.	
			Signal (terminal)	Brake power supply backup unit signal	
C18D2			Threshold	When a malfunction is detected in the brake power supply backup unit (discharge circuit open).	
			Diagnosis delay time	1 second or less	

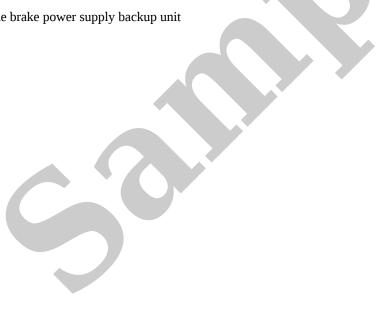
# **POSSIBLE CAUSE**

Brake power supply backup unit

# **FAIL-SAFE**

The following functions are suspended.

Power supply from the brake power supply backup unit



# 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.

# **CAUTION:**

Never operate the vehicle.

>>

# GO TO 2.

# 2. CHECK DTC DETECTION

# **(E)**With CONSULT

1. Power switch OFF to ON without depressing the brake pedal.

### **CAUTION:**

Never set the vehicle to READY.

- 2. Power switch OFF and disconnect CONSULT from data link connector.
- 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. Erase self-diagnosis result for "BRAKE".
- 6. Power switch OFF and disconnect CONSULT from data link connector.
- 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 "BRAKE".

# Is DTC "C18D2-12" detected?

Refer to <u>DTC Diagnosis Procedure</u>.

NO-1>>

To check malfunction symptom before repair: Refer to <u>Intermittent Incident</u>.

NO-2>>

Confirmation after repair: INSPECTION END



# 1. CHECK 12V BATTERY

- 1. Power switch OFF and disconnect CONSULT from data link connector.
- 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. Check the 12V battery terminal connections.
- 4. Check the 12V battery.

Is the inspection result normal?

YES>>

GO TO 2.

NO>>

Repair or replace error-detected parts. GO TO 2.

# 2. PERFORM SELF-DIAGNOSIS (1)

- **With CONSULT** 
  - 1. Connect 12V battery cable to negative terminal.
  - 2. Power switch OFF to ON without depressing the brake pedal.

# **CAUTION:**

Never set the vehicle to READY.

- 3. Power switch OFF and disconnect CONSULT from data link connector.
- 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. Power switch OFF to ON without depressing the brake pedal.

### **CAUTION:**

Never set the vehicle to READY.

- 6. Erase self-diagnosis result for "BRAKE".
- 7. Power switch OFF and disconnect CONSULT from data link connector.
- 8. 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:**

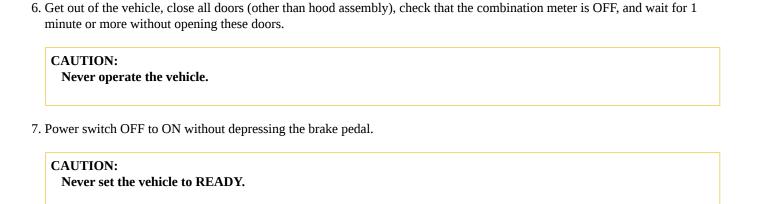
9. Power switch OFF to ON without depressing the brake pedal. **CAUTION:** Never set the vehicle to READY. 10. Perform self-diagnosis for "BRAKE". Is DTC "C18D2-12" detected? YES>> GO TO 3. NO>> INSPECTION END 3. CHECK CONNECTOR TERMINALS 1. Power switch OFF and disconnect CONSULT from data link connector. 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. Disconnect 12V battery cable from negative terminal. 4. Disconnect electrically-driven intelligent brake unit harness connector, then check for malfunctions of terminals and connections. 5. Disconnect brake power supply backup unit harness connector, then check for malfunctions of terminals and connections. Is the inspection result normal? YES>> GO TO 5. NO>> Repair / replace harness, connector, or terminal. GO TO 4. 4. PERFORM SELF-DIAGNOSIS (2) With CONSULT 1. Connect electrically-driven intelligent brake unit harness connector. 2. Connect brake power supply backup unit harness connector. 3. Connect 12V battery cable to negative terminal. 4. Power switch OFF to ON without depressing the brake pedal.

Never operate the vehicle.

**CAUTION:** 

Never set the vehicle to READY.

5. Power switch OFF and disconnect CONSULT from data link connector.



- 8. Erase self-diagnosis result for "BRAKE".
- 9. Power switch OFF and disconnect CONSULT from data link connector.
- 10. 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.

11. Power switch OFF to ON without depressing the brake pedal.

### **CAUTION:**

Never set the vehicle to READY.

12. Perform self-diagnosis for "BRAKE".

Is DTC "C18D2-12" detected?

YES>>

GO TO 5.

NO>>

INSPECTION END

# 5. CHECK ELECTRICALLY-DRIVEN INTELLIGENT BRAKE UNIT POWER SUPPLY AND GROUND CIRCUIT

- 1. Connect brake power supply backup unit harness connector.
- 2. Connect 12V battery cable to negative terminal.
- 3. Power switch OFF and disconnect CONSULT from data link connector.
- 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. Disconnect 12V battery cable from negative terminal.
- 6. Check the electrically-driven intelligent brake unit power supply and ground circuit. Refer to Diagnosis Procedure.

# Is the inspection result normal?

epair / replace harness, connector, terminal, fuse, or fusible link. GO TO 6.  6. PERFORM SELF-DIAGNOSIS (3)  With CONSULT  1. Power switch OFF to ON without depressing the brake pedal.  CAUTION: Never set the vehicle to READY.
With CONSULT  1. Power switch OFF to ON without depressing the brake pedal.  CAUTION:
Power switch OFF to ON without depressing the brake pedal.  CAUTION:
CAUTION:
2. Power switch OFF and disconnect CONSULT from data link connector.
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. Erase self-diagnosis result for "BRAKE".
6. Power switch OFF and disconnect CONSULT from data link connector.
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 "BRAKE".
SDTC "C18D2-12" detected?
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<u>60 TO 7</u> .
(0>>
NSPECTION END

1. Power switch OFF and disconnect CONSULT from data link connector.

<u>GO TO 6</u>.

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. Disconnect 12V battery cable from negative terminal.
- 4. Disconnect electrically-driven intelligent brake unit harness connector.
- 5. Disconnect brake power supply backup unit harness connector.
- 6. Check the continuity between electrically-driven intelligent brake unit and brake power supply backup unit.

Electrically-driven intelligen	t brake unit	Brake power supply backup unit		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
	17	B94	1	Existed	
B63*1			4	Not existed	
B64*2			5	Not existed	
			6	Not existed	

<sup>\*1:</sup> Without ProPILOT Assist 2.0

7. Check the continuity between brake power supply backup unit and ground.

Brake power supply backup unit			Continuity	
Connector	Terminal	<u> </u>	Continuity	
B94	1	Ground	Not existed	

Is the inspection result normal?

YES>>

GO TO 8.

NO>>

Repair / replace harness or connector. GO TO 8.

# 8. CHECK BRAKE POWER SUPPLY BACKUP UNIT POWER SUPPLY CIRCUIT (2)

- 1. Power switch OFF and disconnect CONSULT from data link connector.
- 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. Disconnect 12V battery cable from negative terminal.
- 4. Check the 30A fusible link (#62).
- 5. Check the continuity and for short circuit between harness connector terminal 6 of brake power supply backup unit and 30A fusible link (#62).

Is the inspection result normal?

<sup>\*2:</sup> With ProPILOT Assist 2.0

NO>>

Perform trouble diagnosis for 12V battery power supply.

# 9. CHECK BRAKE POWER SUPPLY BACKUP UNIT COMMUNICATION CIRCUIT

1. Check the continuity between electrically-driven intelligent brake unit and brake power supply backup unit.

Electrically-driven intelligen	t brake unit	Brake power supply backup unit		Continuity
Connector Terminal		Connector	Terminal	
			1	Not existed
B63*1	4*1	B94	4	Not existed
B64 <sup>*2</sup>	5 <sup>*2</sup>	Б94	5	Existed
			6	Not existed

<sup>\*1:</sup> Without ProPILOT Assist 2.0

2. Check the continuity between brake power supply backup unit and ground.

Brake power supply backup unit			Continuity	
Connector	Terminal		Continuity	
B94	5	Ground	Not existed	

Is the inspection result normal?

YES>>

GO TO 10.

NO>>

Repair / replace harness or connector. GO TO 10.

# 10. CHECK BRAKE POWER SUPPLY BACKUP UNIT WAKE UP CIRCUIT

1. Check the continuity between electrically-driven intelligent brake unit and brake power supply backup unit.

Electrically-driven intelligent brake unit		Brake power supply backup unit		Continuity
Connector	Terminal	Connector	Terminal	Continuity
	24	B94	1	Not existed
B63*1			4	Existed
B64*2			5	Not existed
			6	Not existed

<sup>\*1:</sup> Without ProPILOT Assist 2.0

<sup>\*2:</sup> With ProPILOT Assist 2.0

<sup>\*2:</sup> With ProPILOT Assist 2.0

<sup>2.</sup> Check the continuity between brake power supply backup unit and ground.