

# 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.

**1995 NISSAN Patrol LWB OEM Service and Repair** Workshop Manual

Go to manual page

Never operate the vehicle.

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 "C18DE-87" detected?

YES>>

#### <u>GO TO 3</u>.

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>>

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

NO>>

Repair / replace harness, connector, or terminal. GO TO 4.

# 4. PERFORM SELF-DIAGNOSIS (2)

#### (B) 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.

#### CAUTION: Never set the vehicle to READY.

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

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

#### CAUTION: Never set the vehicle to READY.

- 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 "C18DE-87" detected?

YES>>

<u>GO TO 5</u>.

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?

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

# 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.

- 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 "C18DE-87" detected?

YES>>

#### <u>GO TO 7</u>.

NO>>

INSPECTION END

## 7. CHECK BRAKE POWER SUPPLY BACKUP UNIT POWER SUPPLY CIRCUIT (1)

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.

- 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	
			1	Existed	
B63 <sup>*1</sup>	17	B94	4	Not existed	
B64 <sup>*2</sup>	17		5	Not existed	
		6	Not existed		

- \*1: Without ProPILOT Assist 2.0
- \*2: With ProPILOT Assist 2.0
- 7. Check the continuity between brake power supply backup unit and ground.

Brake power supply backup unit			Continuity
Connector	Terminal	·—	Continuity
B94	1	Ground	Not existed

Is the inspection result normal?

#### YES>>

#### <u>GO TO 8</u>.

NO>>

Repair / replace harness or connector. <u>GO TO 8</u>.

# 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?

#### YES>>

## GO TO 9.

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 in	itelligent brake unit	Brake power supply t	Brake power supply backup unit	
Connector	Terminal	Connector	Terminal	• Continuity
			1	Not existed
B63 <sup>*1</sup>	$4^{*1}$	B94	4	Not existed
B64 <sup>*2</sup>	5 <sup>*2</sup>	5	Existed	
			6	Not existed

\*1: Without ProPILOT Assist 2.0

\*2: With 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>>

<u>GO TO 10</u>.

NO>>

Repair / replace harness or connector. <u>GO TO 10</u>.

# **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 intelligen	it brake unit	Brake power supply backup unit		Continuity	
Connector	Terminal	Connector	Terminal	Continuity	
B63 <sup>*1</sup> B64 <sup>*2</sup>	24	B94	1	Not existed	
			4	Existed	
			5	Not existed	
			6	Not existed	

\*1: Without ProPILOT Assist 2.0

\*2: With ProPILOT Assist 2.0

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

Brake power supply backup unit		Continuity	
Connector Terminal			
В94	4	Ground	Not existed

Is the inspection result normal?

YES>>

Replace the brake power supply backup unit. Refer to <u>BRAKE POWER SUPPLY BACKUP UNIT : Removal & Installation</u>.

NO>>

Repair / replace harness or connector.

# **DTC DETECTION LOGIC**

DTC N	lo.	CONSULT screen terms	n DTC detection condition		DTC detection condition		
				Diagnosis condition	When power switch is ON.		
				Signal (terminal)	Brake power supply backup unit signal		
	C18EB 01 Backup power		Threshold	When brake power supply backup unit power supply voltage is 7.5 V or less.			
C18EB		ackup power	Diagnosis delay time	1 second or less			
CIOED	01	supply unit	supply unit	supply unit	supply unit Diagn	Diagnosis condition	When power switch is ON.
	2			2	Signal (terminal)	Brake power supply backup unit signal	
		Threshold	When brake power supply backup unit power supply voltage is 9.0 V or less (when brake operation is not request).				
				Diagnosis delay time	2 seconds or more		

# **POSSIBLE CAUSE**

- Brake power supply backup unit
- Brake power supply backup unit power supply system

# FAIL-SAFE

The following functions are suspended.

- Cooperative regenerative brake function
- e-Step 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.

#### CAUTION:

Never operate the vehicle.

#### >>

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

## 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 "C18EB-01" detected?

Refer to DTC Diagnosis Procedure.

NO-1>>

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

NO-2>>

Confirmation after repair: INSPECTION END