

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 Patrol SWB 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.

>>

GO TO 2

2. CHECK DTC DETECTION

(E)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 "U0073-88" 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

Refer to Trouble Diagnosis Flow Chart.



DTC DETECTION LOGIC

DTC No.		CONSULT screen terms	DTC detection condition	
		Battery power supply	Diagnosis condition	Power switch is ON.When the power supply voltage is normal.
C1056	13		Signal (terminal)	Power switch ON power supply
			Threshold	When power switch ON power supply voltage is 10 V or less.
			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
 Harness or connector Charge system ABS actuator and electric unit (control unit) power supply system Fuse Fusible link 12V battery 	 Harness or connector Charge system ABS actuator and electric unit (control unit) ABS actuator and electric unit (control unit) power supply system Fuse Fusible link 12V battery

FAIL-SAFE

Normal control

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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GO TO 2.

2. CHECK DTC DETECTION

(E)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 "C1056-13" detected?

YES-1>>

"CRNT" is displayed: Refer to DTC Diagnosis Procedure.

YES-2>>

"PAST" is displayed: Check the 12V battery (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 12V BATTERY

Check the 12V battery. Refer to Work Procedure.

Is the inspection result normal?

YES>>

GO TO 2.

NO>>

Repair or replace error-detected parts.

2. CHECK CONNECTOR

- 1. Disconnect 12V battery negative terminal.
- 2. Check the ABS actuator and electric unit (control unit) harness connector for disconnection or looseness.

Is the inspection result normal?

YES>>

GO TO 3.

NO>>

Repair / replace harness or connector, securely lock the connector.

3. 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 4.

NO>>

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

4. CHECK VCM SYSTEM

! With CONSULT

Perform self-diagnosis for "EV/HEV".

Is DTC detected?

YES>>

Check the DTC. Refer to DTC Index.

NO>>

GO TO 5.

5. PERFORM SELF-DIAGNOSIS

(H)With CONSULT

- 1. Connect 12V battery negative terminal.
- 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 "C1056-13" detected?

YES-1>>

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

YES-2>>

"PAST" is displayed: Check the 12V battery. Refer to Work Procedure.

NO>>

INSPECTION END

DTC DETECTION LOGIC

DTC No.		CONSULT screen terms	DTC detection condition	
C1056	16	Battery power supply	Diagnosis condition	Power switch is ON.When the power supply voltage is normal.
			Signal (terminal)	Power switch ON power supply
			Threshold	When power switch ON power supply voltage is 10 V or less.
			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
 Harness or connector Charge system ABS actuator and electric unit (control unit) power supply system Fuse Fusible link 12V battery 	 Harness or connector Charge system ABS actuator and electric unit (control unit) ABS actuator and electric unit (control unit) power supply system Fuse 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.

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GO TO 2.

2. CHECK DTC DETECTION

(B)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 "C1056-16" detected?

YES-1>>

"CRNT" is displayed: Refer to DTC Diagnosis Procedure.

YES-2>>

"PAST" is displayed: Check the 12V battery (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