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2023 NISSAN Altima Service and Repair Manual

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NO-1>>

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

NO-2>>



1. CHECK DTC PRIORITY

If DTC "U2148-86" is displayed with Network-DTC, first diagnose the Network-DTC.

Is applicable DTC detected?

YES>>

Perform diagnosis of applicable. Refer to <u>DTC Index</u>.

NO>>

GO TO 2.

2. CHECK ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT) SELF DIAGNOSTIC RESULT

Check if any DTC is detected in "Self Diagnostic Result" of "ABS".

Is any DTC detected?

YES>>

Perform diagnosis on the detected DTC and repair or replace the malfunction part. Refer to DTC Index.

NO>>

Replace the side radar rear RH. Refer to Removal and Installation.

CAN COMMUNICATION

- CAN communication is a multiplex communication system. This enables the system to transmit and receive large quantities of data at high speed by connecting control units with 2 communication lines.
- CAN communication lines adopt twisted-pair line style (two lines twisted) for noise immunity.

Refer to CAN Communication Signal Chart.

DTC DETECTION LOGIC

DTC No.	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
U2148- 87	CAN communication error (brake control unit)	Diagnosis condition	When vehicle is READY
		Signal (terminal)	CAN communication signal
		Threshold	If side radar rear RH is not transmitting or receiving CAN communication signal
		Diagnosis delay time	2 seconds or more



If "U2148-87" is detected, first diagnose the CAN communication system.

POSSIBLE CAUSE

CAN communication system

FAIL-SAFE

The following systems are canceled.

- Vehicle speed & vehicle-to-vehicle control function
- Lane keep function*1
- Lane keep function*2
- Lane change support function
- Overtaking support function
- Route driving support function
- BSW
- I-BSI
- RCTA
- *1: ProPILOT Assist 2.0 display is green
- *2: ProPILOT Assist 2.0 display is blue



With the detection of "U2148-87" some systems do not perform the fail-safe operation. A system controlling based on a signal received from the control unit performs fail-safe operation when the communication with the side radar RH becomes inoperable.

CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Set the vehicle to READY, and then wait for 2 seconds or more.
- 2. Perform "All DTC Reading" with CONSULT.
- 3. Check if the "U2148-87" is detected as the current malfunction in "Self Diagnostic Result" of "Side radar (Rear right)".

Is "U2148-87" detected as the current malfunction?

YES >>

DTC Diagnosis Procedure

NO-1 >>

To check malfunction symptom before repair: Intermittent Incident

NO-2 >>

1. PERFORM THE SELF-DIAGNOSIS

- 1. Erase all self-diagnosis results of "Side radar (Rear right)" with CONSULT.
- 2. Perform DTC confirmation procedure again. Refer to <u>DTC Description</u>.
- 3. Check if the "U2148-87" is detected as the current malfunction in "Self Diagnostic Result" of "Side radar (Rear right)".

<u>Is "U2148-87" detected as the current malfunction?</u>

YES >>

Trouble Diagnosis Flow Chart

NO>>

INSPECTION END



DTC DETECTION LOGIC

DTC No.		CONSULT screen terms	DTC detection condition	
		(Trouble diagnosis content)	D1C detection condition	
U214F	81	CAN communication error (BCM)	Diagnosis condition	When power switch is ON.
			Signal (terminal)	CAN communication signal
			Threshold	Side radar front LH detects that BCM has a malfunction
			Diagnosis delay time	1 second or less

POSSIBLE CAUSE

BCM

FAIL-SAFE

The following systems are canceled.

- Vehicle speed & vehicle-to-vehicle control function
- Lane keep function*1
- Lane keep function*2
- Lane change support function
- Overtaking support function
- Route driving support function
- *1:ProPILOT Assist 2.0 display is green
- *2:ProPILOT Assist 2.0 display control blue

CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn power switch ON.
- 2. Perform "All DTC Reading" with CONSULT.
- 3. Check if the "U214F-81" is detected as the current malfunction in "Self Diagnostic Result" of "Side radar (Front left)".

Is "U214F-81" detected as the current malfunction?

YES>>

Refer to DTC Diagnosis Procedure.

NO-1>>

To check malfunction symptom before repair: Refer to Intermittent Incident.

NO-2>>

1. CHECK DTC PRIORITY

If DTC "U214F-81" is displayed with Network-DTC, first diagnose the Network-DTC.

Is applicable DTC detected?

YES>>

Perform diagnosis of applicable. Refer to <u>DTC Index</u>.

NO>>

GO TO 2.

2. PERFORM SELF-DIAGNOSIS OF BCM

Check if any DTC is detected in "Self Diagnostic Result" of "BCM".

Is any DTC detected?

YES>>

Perform diagnosis on the detected DTC and repair or replace the malfunctioning parts. Refer to DTC Index.

NO>>

Replace the side radar front LH. Refer to Removal and Installation.

DTC DETECTION LOGIC

DTC No.		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition		
U214F	82	CAN communication error (brake control unit)	Diagnosis condition	When power switch is ON.	
			Signal (terminal)	CAN communication signal	
			Threshold	Side radar front LH detects that BCM has a malfunction	
			Diagnosis delay time	1 second or less	

POSSIBLE CAUSE

BCM

FAIL-SAFE

The following systems are canceled.

- Vehicle speed & vehicle-to-vehicle control function
- Lane keep function*1
- Lane keep function*2
- Lane change support function
- Overtaking support function
- Route driving support function
- *1:ProPILOT Assist 2.0 display is green

CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn power switch ON.
- 2. Perform "All DTC Reading" with CONSULT.
- 3. Check if the "U214F-82" is detected as the current malfunction in "Self Diagnostic Result" of "Side radar (Front left)".

Is "U214F-82" detected as the current malfunction?

YES>>

Refer to DTC Diagnosis Procedure.

NO-1>>

To check malfunction symptom before repair: Refer to Intermittent Incident.

NO-2>>

^{*2:}ProPILOT Assist 2.0 display control blue

