

Your Ultimate Source for OEM Repair Manuals

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2023 NISSAN 370Z Roadster Service and Repair Manual

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NO-1>>

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

NO-2>>

Confirmation after repair: INSPECTION END



1. CHECK DTC PRIORITY

If DTC "U2156-81" 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. 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		
U2156- 87	CAN communication error (steering angle sensor)	Diagnosis condition	When vehicle is READY	
		Signal (terminal)	CAN communication signal	
		Threshold	If side radar RH is not transmitting or receiving CAN communication signal	
		Diagnosis delay time	2 seconds or more	



If "U2156-87" 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 "U2156-87" 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 "U2156-87" is detected as the current malfunction in "Self Diagnostic Result" of "Side radar (Rear right)".

Is "U2156-87" 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 >>

Confirmation after repair: INSPECTION END

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 "U2156-87" is detected as the current malfunction in "Self Diagnostic Result" of "Side radar (Rear right)".

<u>Is "U2156-87" detected as the current malfunction?</u>

YES >>

Refer to Trouble Diagnosis Flow Chart.

NO>>

INSPECTION END



DTC DETECTION LOGIC

DTC No.		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
C1E94		Radar electromagnetic interference	Diagnosis condition	When power switch is ON.
	97		Signal (terminal)	CAN communication signal
	37		Threshold	_
			Diagnosis delay time	1 second or less

POSSIBLE CAUSE

- When there is something that emits strong radio waves near the vehicle (example: large radio, radar facility, etc.)
- Ran near something that emits strong radio waves

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

CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn power switch ON.
- 2. Perform "All DTC Reading" with CONSULT.
- 3. Check if the "C1E94-97" is detected as the current malfunction in "Self Diagnostic Result" of "Side radar (Rear right)".

Is the "C1E94-97" detected as the current malfunction?

YES>>

Refer to DTC Diagnosis Procedure.

To check malfunction symptom before repair: Refer to $\underline{\text{Intermittent Incident}}.$

NO-2>>

Confirmation after repair: INSPECTION END



1. PERFORM SIDE RADAR ALIGNMENT

- 1. Adjust the side radar alignment. Refer to Work Procedure.
- 2. Erase all self-diagnosis results of "Side radar (Rear right)" with CONSULT.
- 3. Perform "All DTC Reading".
- 4. Check if the "C1E94-97" is detected in "Self Diagnostic Result" of "Side radar (Rear right)".

Is "C1E94-97" detected?

YES>>

GO TO 2.

NO>>

INSPECTION END

2. CHECK THE SURROUNDING CONDITIONS

Check if there is anything that emits radio waves near the vehicle.

Is there anything near the vehicle that emits radio waves?

YES>>

Move the vehicle away from devices that emit radio waves and check the DTC confirmation procedure again. Refer to \underline{DTC} $\underline{Description}$.

NO>>

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

DTC DETECTION LOGIC

DTC N	No.	CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
U2148	ומו	CAN communication error (brake control unit)	Diagnosis condition	When power switch is ON.
			Signal (terminal)	CAN communication signal
			Threshold	Side radar rear RH detects that ABS actuator and electric unit (control unit) has a malfunction
			Diagnosis delay time	1 second or less

POSSIBLE CAUSE

ABS actuator and electric unit (control unit)

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

CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Turn power switch ON.
- 2. Perform "All DTC Reading" with CONSULT.
- 3. Check if the "U2148-81" is detected as the current malfunction in "Self Diagnostic Result" of "Side radar (Rear right)".

Is the "U2148-81" detected as the current malfunction?

YES>>