

Your Ultimate Source for OEM Repair Manuals

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2023 NISSAN GT-R Nismo Service and Repair Manual

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1. CHECK SIDE RADAR FRONT LH INSTALL CONDITION

Check if a side radar with registered position information other than the side radar front LH is connected to the side radar front LH connector.

Is the inspection result normal?

YES>>

Replace the side radar front LH. Refer to [Removal and Installation](#).

NO>>

Repair or replace the malfunctioning parts.

Sample

DTC DETECTION LOGIC

DTC No.		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
U2156	81	CAN communication error (steering angle sensor)	Diagnosis condition	When power switch is ON.
			Signal (terminal)	CAN communication signal
			Threshold	Side radar front LH detects that steering angle sensor has a malfunction
			Diagnosis delay time	1 second or less

POSSIBLE CAUSE

Steering angle sensor

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 is blue

CONFIRMATION PROCEDURE

1. PERFORM DTC CONFIRMATION

1. Turn power switch ON.
2. Perform "All DTC Reading" with CONSULT.
3. Check if the "U2156-81" is detected as the current malfunction in "Self Diagnostic Result" of "Side radar (Front left)".

Is "U2156-81" 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>>

Sample

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 [DTC Index](#).

NO>>

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2. PERFORM SELF-DIAGNOSIS OF ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT)

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 malfunctioning parts. Refer to [DTC Index](#).

NO>>

Replace the side radar front LH. 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 front LH is not transmitting or receiving CAN communication signal
			Diagnosis delay time	2 seconds or more



NOTE:

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

*1 : ProPILOT Assist 2.0 display is green

*2 : ProPILOT Assist 2.0 display is blue



NOTE:

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 front LH 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 (Front left)”.

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

Sample

1. PERFORM THE SELF-DIAGNOSIS OF SIDE RADAR FRONT LH

1. Erase all self-diagnosis results of “Side radar (Front left)” with CONSULT.
2. Perform DTC confirmation procedure again. Refer to [DTC Description](#).
3. Check if the “U2156-87” is detected as the current malfunction in “Self Diagnostic Result” of “Side radar (Front left)”.

Is “U2156-87” detected as the current malfunction?

YES>>

Refer to [Trouble Diagnosis Flow Chart](#).

NO>>

INSPECTION END

Sample

DTC DETECTION LOGIC

DTC No.		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
C1E54	97	Radar electromagnetic interference	Diagnosis condition	When power switch is ON.
			Signal (terminal)	CAN communication signal
			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

*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 “C1E54-97” is detected as the current malfunction in “Self Diagnostic Result” of “Side radar (Front left)”.

Is the “C1E54-97” 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>>

Sample