

# Your Ultimate Source for OEM Repair Manuals

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2022 NISSAN X-Trail Service and Repair Manual

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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. Perform 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" with CONSULT.
- 4. Check if the "C1E90-78" is detected in "Self Diagnostic Result" of "Side radar (Rear right)".

#### Is "C1E90-78" detected?

YES >>

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

NO >>

INSPECTION END



# **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		
U1B4E- 87	CAN communication error	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 "U1B4E-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 "U1B4E-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. Turn the vehicle is READY, and then wait for 2 seconds or more.
- 2. Perform "All DTC Reading" with CONSULT.
- 3. Check if the "U1B4E-87" is detected as the current malfunction in "Self Diagnostic Result" of "Side radar (Rear right)".

Is "U1B4E-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 "U1B4E-87" is detected as the current malfunction in "Self Diagnostic Result" of "Side radar (Rear right)".

#### <u>Is "U1B4E-87" detected as the current malfunction?</u>

YES >>

Refer to Trouble Diagnosis Flow Chart.

NO>>

INSPECTION END



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- 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		
U2152- 87	CAN communication error (ADAS 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 "U2152-87" 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 "U2152-87" 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 "U2152-87" is detected as the current malfunction in "Self Diagnostic Result" of "Side radar (Rear right)".

Is "U2152-87" 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 "U2152-87" is detected as the current malfunction in "Self Diagnostic Result" of "Side radar (Rear right)".

#### <u>Is "U2152-87" detected as the current malfunction?</u>

YES >>

Refer to Trouble Diagnosis Flow Chart.

NO>>

INSPECTION END



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- 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	
U216C- 87	CAN communication error (side radar)	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 "U216C-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