

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.

2021 NISSAN Patrol Service and Repair Manual

Go to manual page

1. CHECK DTC PRIORITY

If DTC "C258F-82" 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 IPDM E/R SELF-DIAGNOSIS RESULTS

Check if any DTC is detected in "Self Diagnostic Result" of "IPDM E/R".

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 distance sensor. Refer to Removal and Installation.

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
C258F	86	IPDM E/R (Intelligent power distribution module engine room)	Diagnosis condition	When vehicle is READYWhen AEB system is ON
G2501			Signal (terminal)	CAN communication signal
			Threshold	If the IPDM E/R is malfunction
			Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

IPDM E/R

FAIL-SAFE

The following systems are canceled.

- Vehicle-to-vehicle distance control mode*1
- Conventional (fixed speed) cruise control mode*1
- Steering wheel assistance function*1
- Vehicle speed & vehicle-to-vehicle control function*2
- Lane keep function*2,3
- Lane keep function*2,4
- Lane change support function*2
- Overtaking support function*2
- Route driving support function*2
- AEB
- RAB
- I-FCW
- *1: With ProPILOT Assist, Without ProPILOT Assist 2.0
- *2: With ProPILOT Assist 2.0
- *3: ProPILOT Assist 2.0 display is green
- *4: ProPILOT Assist 2.0 display is blue

CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC "C258F-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. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Set the vehicle to READY.
- 2. Turn the AEB system ON, and then wait for 2 seconds or more.
- 3. Perform "All DTC Reading" with CONSULT.
- 4. Check if the "C258F-86" is detected as the current malfunction in self-diagnosis results of "LASER/RADAR".

<u>Is "C258F-86" detected as the current malfunction?</u>

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. CHECK DTC PRIORITY

If DTC "C258F-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 IPDM E/R SELF-DIAGNOSIS RESULTS

Check if any DTC is detected in "Self Diagnostic Result" of "IPDM E/R".

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 distance sensor. Refer to Removal and Installation.

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
C258F	87	IPDM E/R (Intelligent power distribution module engine room)	Diagnosis condition	When vehicle is READYWhen AEB system is ON
C2501			Signal (terminal)	CAN communication signal
			Threshold	If the IPDM E/R is malfunction
			Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

IPDM E/R

FAIL-SAFE

The following systems are canceled.

- Vehicle-to-vehicle distance control mode*1
- Conventional (fixed speed) cruise control mode*1
- Steering wheel assistance function*1
- Vehicle speed & vehicle-to-vehicle control function*2
- Lane keep function*2,3
- Lane keep function*2,4
- Lane change support function*2
- Overtaking support function*2
- Route driving support function*2
- AEB
- RAB
- I-FCW
- *1: With ProPILOT Assist, Without ProPILOT Assist 2.0
- *2: With ProPILOT Assist 2.0
- *3: ProPILOT Assist 2.0 display is green
- *4: ProPILOT Assist 2.0 display is blue

CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC "C258F-87" 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 DTC CONFIRMATION PROCEDURE

- 1. Set the vehicle to READY.
- 2. Turn the AEB system ON, and then wait for 2 seconds or more.
- 3. Perform "All DTC Reading" with CONSULT.
- 4. Check if the "C258F-87" is detected as the current malfunction in self-diagnosis results of "LASER/RADAR".

<u>Is "C258F-87" detected as the current malfunction?</u>

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. CHECK DTC PRIORITY

If DTC "C258F-87" 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 IPDM E/R SELF-DIAGNOSIS RESULTS

Check if any DTC is detected in "Self Diagnostic Result" of "IPDM E/R".

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 distance sensor. Refer to Removal and Installation.

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
U2143	83	CAN communication error (VCM/HCM)	Diagnosis condition	When vehicle is READYWhen AEB system is ON
			Signal	CAN communication signal
			Threshold	If the VCM is malfunction
			Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

VCM

FAIL-SAFE

The following systems are canceled.

- Vehicle-to-vehicle distance control mode*1
- Conventional (fixed speed) cruise control mode*1
- Steering wheel assistance function*1
- Vehicle speed & vehicle-to-vehicle control function*2
- Lane keep function*2,3
- Lane keep function*2,4
- Lane change support function*2
- Overtaking support function*2
- Route driving support function*2
- AEB
- RAB
- I-FCW
- *1: With ProPILOT Assist, Without ProPILOT Assist 2.0
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- *3: ProPILOT Assist 2.0 display is green
- *4: ProPILOT Assist 2.0 display is blue

CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

<u>Is applicable DTC detected?</u>

YES>>

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

NO>>

<u>GO TO 2</u>.

2. PERFORM DTC CONFIRMATION PROCEDURE

- 1. Set the vehicle to READY.
- 2. Turn the AEB system ON, and then wait for 2 seconds or more.
- 3. Perform "All DTC Reading" with CONSULT.
- 4. Check if the "U2143-83" is detected as the current malfunction in self-diagnosis results of "LASER/RADAR".

"U2143-83" 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