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2020 NISSAN Frontier/Navara Double Cab Service and Repair Manual

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DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
U2B52	88	Comm Bus Off CH2-CAN (Communication Bus Off CH2-CAN)	Diagnosis condition	When vehicle is READY
			Signal (terminal)	Ethernet communication
			Threshold	If ADAS control unit 2 is not receiving ethernet communication signal from around view monitor control unit
			Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

- Ethernet harness
- ADAS control unit 2
- Around view monitor control unit

FAIL-SAFE

The following systems are canceled.

- Lane keep function*¹
- Lane keep function*²
- Lane change support function
- Overtaking support function
- Route driving support function
- AEB
- RAB
- I-FCW
- I-LI
- I-BSI
- TSR

*1: ProPILOT Assist 2.0 display is green

*2: ProPILOT Assist 2.0 display is blue

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 “U2B52-88” is detected as the current malfunction in “Self Diagnostic Result” of “ICC/ADAS 2”.

Is “U2B52-88” 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. CHECK CONSULT DISPLAY AROUND VIEW MONITOR CONTROL UNIT

1. Perform "All DTC Reading" with CONSULT.
2. Check if the item of "AVM" is displayed in "All DTC Reading".

Is "AVM" displayed?

YES>>

[GO TO 2.](#)

NO>>

Check power supply and ground circuit of around view monitor control unit. Refer to [Diagnosis Procedure](#).

2. PERFORM SELF-DIAGNOSIS OF AROUND VIEW MONITOR CONTROL UNIT

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

Is any DTC detected?

YES>>

Perform diagnosis on the detected DTC and repair or replace the malfunctioning parts. Refer to [DTC Index](#).

NO>>

[GO TO 3.](#)

3. CHECK ETHERNET CABLE

1. Turn the power switch OFF.
2. Check the Ethernet cable of ADAS control unit 2 and around view monitor control unit for disconnection, bending, and poor fitting.

Is the inspection result normal?

YES>>

[GO TO 4.](#)

NO>>

Replace ethernet cable.

4. REPLACE ETHERNET CABLE

1. Replace ethernet cable.
2. Perform DTC confirmation procedure again. Refer to [DTC Description](#).

Is "U2B52-88" detected as the current malfunction?

YES>>

[GO TO 5.](#)

NO>>

INSPECTION END

5. REPLACE AROUND VIEW MONITOR CONTROL UNIT

1. Replace around view monitor control unit. Refer to [Removal and Installation](#).
2. Perform DTC confirmation procedure again. Refer to [DTC Description](#).

Is “U2B52-88” detected as the current malfunction?

YES>>

Replace the ADAS control unit 2. Refer to [Removal and Installation](#).

NO>>

INSPECTION END

Sample

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
C1F03	23	OPERATION SW CIRC (Operation switch circuit)	Diagnosis condition	<ul style="list-style-type: none"> When vehicle is READY When ProPILOT Assist 2.0 MAIN switch is ON
			Signal (terminal)	Steering switch signal
			Threshold	Any switch of the ProPILOT Assist 2.0 steering switch is detected as "ON"
			Diagnosis delay time	Continuously 60 seconds

POSSIBLE CAUSE

- ProPILOT Assist 2.0 steering switch circuit
- ProPILOT Assist 2.0 steering switch.
- VCM

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
- AEB
- RAB
- I-FCW
- I-LI
- I-BSI
- TSR

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*2: ProPILOT Assist 2.0 display is blue

CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC “C1F03-23” is displayed with Network-DTC, first diagnose the Network-DTC.

Is applicable DTC detected?

YES >>

Perform diagnosis of applicable. Refer to [DTC Index](#).

NO >>

[GO TO 2](#).

2. PERFORM DTC CONFIRMATION PROCEDURE

1. Set the vehicle to READY.
2. Wait for approximately 5 minutes after turning the ProPILOT Assist 2.0 MAIN switch ON.
3. Perform “All DTC Reading” with CONSULT.
4. Check if the “C1F03-23” is detected as the current malfunction in “Self Diagnostic Result” of “ICC/ADAS 2”.

Is “C1F03-23” 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. CHECK DTC PRIORITY

If DTC “C1F03-23” is displayed with Network-DTC, first diagnose the Network-DTC.

Is applicable DTC detected?

YES >>

Perform diagnosis of applicable. Refer to [DTC Index](#).

NO >>

[GO TO 2.](#)

2. CHECK ProPILOT ASSIST 2.0 STEERING SWITCH

1. Disconnect the ProPILOT Assist 2.0 steering switch connector.
2. Check the ProPILOT Assist 2.0 steering switch. Refer to [Component Inspection](#).

Is the inspection result normal?

YES >>

[GO TO 3.](#)

NO >>

Replace the ProPILOT Assist 2.0 steering switch.

3. CHECK HARNESS BETWEEN SPIRAL CABLE AND VCM

1. Disconnect the VCM connector.
2. Check for continuity between the spiral cable harness connector and VCM harness connector.

Spiral cable		VCM		Continuity
Connector	Terminal	Connector	Terminal	
M150*1	8	E46	14	Existed
M153*2	15		15	

*1: With electrical tilt & telescopic steering

*2: Without electrical tilt & telescopic steering

3. Check for continuity between spiral cable harness connector and ground.

Spiral cable		Ground	Continuity
Connector	Terminal		
M150*1	8	Ground	Not existed
M153*2	15		

*1: With electrical tilt & telescopic steering

*2: Without electrical tilt & telescopic steering

Is the inspection result normal?

YES >>

[GO TO 4.](#)

NO >>

Repair the harnesses or connectors.

4. CHECK SPIRAL CABLE

Check for continuity between spiral cable terminals.

Spiral cable		Continuity
Terminal		
21	8	Existed
29	15	

Is the inspection result normal?

YES >>

[GO TO 5.](#)

NO >>

Replace the spiral cable.

5. PERFORM SELF-DIAGNOSIS OF VCM

Check if any DTC is detected in “Self Diagnostic Result” of “EV/HEV”.

Is any DTC detected?

YES >>

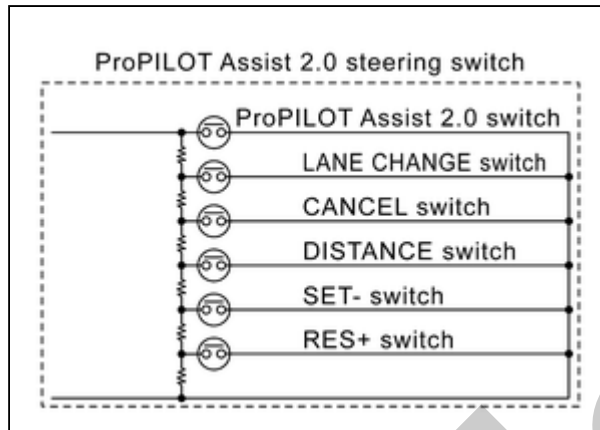
Perform self-diagnosis on the detected DTC and repair or replace the malfunctioning parts. Refer to [DTC Index](#) .

NO >>

Replace the ADAS control unit 2. Refer to [Removal and Installation](#).

1. CHECK ProPILOT ASSIST 2.0 STEERING SWITCH

Check resistance between ProPILOT Assist 2.0 steering switch terminals.



SIEMD-7330706-02-000430596

Terminal		Switch operation	Resistance [Ω]
21	29	When pressing ProPILOT Assist 2.0 MAIN switch	Approx. 0
		When pressing lane change support switch	Approx. 100
		When pressing CANCEL switch	Approx. 237
		When pressing DISTANCE switch	Approx. 428
		When pressing SET- switch	Approx. 729
		When pressing RES+ switch	Approx. 1319
		When all switches are not pressed	Approx. 3529

Is the inspection result normal?

YES>>

INSPECTION END

NO>>

Replace the ProPILOT Assist 2.0 steering switch.