

Your Ultimate Source for OEM Repair Manuals

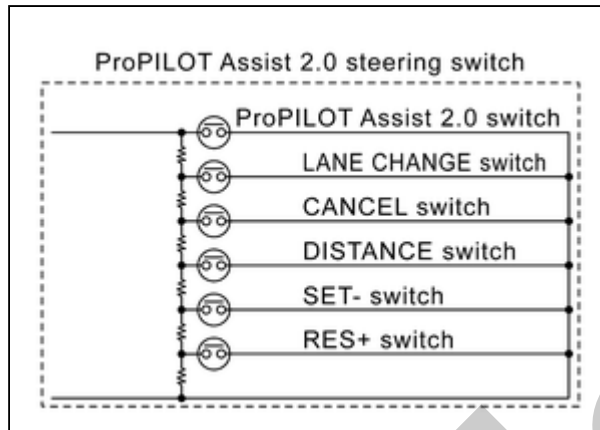
FactoryManuals.net is a great resource for anyone who wants to save money on repairs by doing their own work. The manuals provide detailed instructions and diagrams that make it easy to understand how to fix a vehicle.

2020 Nissan Frontier Service and Repair Manual

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1. CHECK ProPILOT ASSIST 2.0 STEERING SWITCH

Check resistance between ProPILOT Assist 2.0 steering switch terminals.



SIEMD-7330712-02-000430596

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.

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
C1F03	62	OPERATION SW CIRC (Operation switch circuit)	Diagnosis condition	<ul style="list-style-type: none"> When vehicle is READY When ProPILOT Assist MAIN switch is ON
			Signal (terminal)	Steering switch signal
			Threshold	An ON/OFF state judgment of the ProPILOT Assist differs between VCM and ADAS control unit 2
			Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

- ProPILOT Assist steering switch circuit
- ProPILOT Assist steering switch
- VCM

FAIL-SAFE

The following systems are canceled.

- Vehicle-to-vehicle distance control mode
- Conventional (fixed speed) cruise control mode
- Steering wheel assistance function
- I-LI
- I-BSI

CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC "C1F03-62" 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 2 seconds after turning the ProPILOT Assist MAIN switch ON.
3. Perform “All DTC Reading” with CONSULT.
4. Check if the “C1F03-62” is detected as the current malfunction in “Self Diagnostic Result” of “ICC/ADAS 2”.

Is “C1F03-62” 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 DTC PRIORITY

If DTC “C1F03-62” 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 STEERING SWITCH

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

Is the inspection result normal?

YES >>

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NO >>

Replace the ProPILOT Assist 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		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 >>

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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 >>

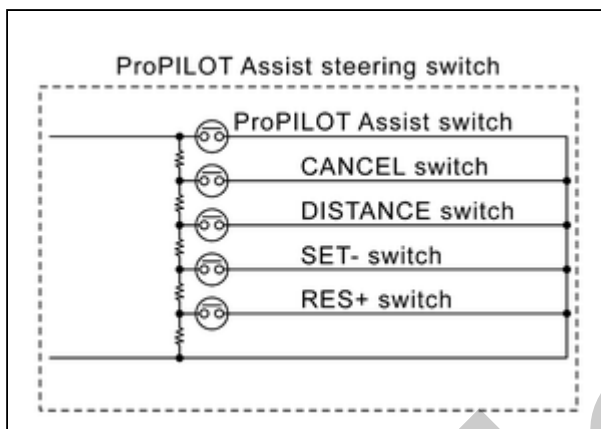
Perform self-diagnosis on the detected DTC and repair or replace the malfunctioning parts. Refer to [DTC Index](#).

NO >>

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

1. CHECK ProPILOT ASSIST STEERING SWITCH

Check resistance between ProPILOT Assist steering switch terminals.



SIEMD-7109332-02-000430595

Terminal		Switch operation	Resistance [Ω]
21	29	When pressing ProPILOT Assist MAIN switch	Approx. 0
		When pressing CANCEL switch	Approx. 309
		When pressing DISTANCE switch	Approx. 741
		When pressing SET- switch	Approx. 1406
		When pressing RES+ switch	Approx. 2586
		When all switches are not pressed	Approx. 5456

Is the inspection result normal?

YES>>

INSPECTION END

NO>>

Replace the ProPILOT Assist steering switch.

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
C1F05	04	Front camera unit (Front camera unit)	Diagnosis condition	When vehicle is READY
			Signal (terminal)	—
			Threshold	If front camera unit is malfunctioning
			Diagnosis delay time	1 second or less

POSSIBLE CAUSE

- Front camera unit
- ADAS control unit 2

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. CHECK DTC PRIORITY

If DTC “C1F05-04” 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 DTC CONFIRMATION PROCEDURE

1. Set the vehicle to READY.
2. Perform “All DTC Reading” with CONSULT.
3. Check if the “C1F05-04” is detected as the current malfunction in “Self Diagnostic Result” of “ICC/ADAS 2”.

Is “C1F05-04” 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 DTC PRIORITY

If DTC “C1F05-04” 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. CHECK FRONT CAMERA UNIT SELF-DIAGNOSTIC RESULT

Check if any DTC is detected in “Self Diagnostic Result” of “LANE CAMERA”.

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