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2019 NISSAN Altima (Thailand) Service and Repair Manual

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DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
U2443	57	CAN comm err (VCM/HCM) [Controller area network communication error (VCM/HCM)]	Diagnosis condition	—
			Signal (terminal)	—
			Threshold	MAC communication error
			Diagnosis delay time	—

POSSIBLE CAUSE

- MAC communication error
- ADAS control unit 2 used in other vehicles is installed in the vehicle
- ADAS control unit 2
- 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
- I-DA

*1: ProPILOT Assist 2.0 display is green

*2: ProPILOT Assist 2.0 display is blue

CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC “U2443-57” is displayed with DTC “U1327-52” or DTC “U1327-54”, first perform the trouble diagnosis for DTC “U1327-52” or “U1327-54”.

Is “U1327-52” or DTC “U1327-54” detected?

YES>>

Perform diagnosis of applicable. Refer to the following.

- U1327-52: Refer to [DTC Description](#).
- U1327-54: Refer to [DTC Description](#).

NO>>

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2. CHECK MAC DIAGNOSIS

 With CONSULT

1. Power switch ON.
2. Perform “MAC Diagnosis” mode of “ICC/ADAS 2” using CONSULT.

Is “U2443-57” 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 “U2443-57” is displayed with DTC “U1327-52” or “U1327-54”, first perform the trouble diagnosis for DTC “U1327-52” or “U1327-54”.

Is DTC “U1327-52” or “U1327-54” detected?

YES>>

Perform diagnosis of applicable. Refer to the following.

- U1327-52: Refer to [DTC Description](#)(Without ProPILOT Assist 2.0) or [DTC Description](#)(With ProPILOT Assist 2.0).
- U1327-54: Refer to [DTC Description](#)(Without ProPILOT Assist 2.0) or [DTC Description](#)(With ProPILOT Assist 2.0).

NO>>

[GO TO 2.](#)

2. CHECK MAC DIAGNOSIS

 With CONSULT

Perform “MAC Diagnosis” mode of “ICC/ADAS 2” using CONSULT.

Is DTC U2443-57” detected with DTC “U2140-57”, “U2143-57”, “U214F-57”, “U2175-57”, “U2176-57”, “U244F-57”, “U2465-57”, “U2475-57” and “U2476-57” at the same time?

YES (all DTC codes are detected at the same time)>>

Replace the ADAS control unit 2. Refer to [Removal and Installation](#)(Without ProPILOT Assist 2.0) or [Removal and Installation](#)(With ProPILOT Assist 2.0).

NO (all DTC codes are not detected at the same time)>>

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3. CHECK CAN DIAGNOSIS

 With CONSULT

Perform "CAN Diag".

Is the inspection result normal?

YES>>

Contact Techline and report the vehicle condition.

NO>>

Repair or replace root cause.

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
U2443	57	CAN comm err (VCM/HCM) [Controller area network communication error (VCM/HCM)]	Diagnosis condition	—
			Signal (terminal)	—
			Threshold	MAC communication error
			Diagnosis delay time	—

POSSIBLE CAUSE

- MAC communication error
- ADAS control unit 2 used in other vehicles is installed in the vehicle
- ADAS control unit 2
- VCM

FAIL-SAFE

The following systems are canceled.

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

CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC “U2443–57” is displayed with DTC “U1327-52” or DTC“U1327-54”, first perform the trouble diagnosis for DTC “U1327-52” or “U1327-54”.

Is “U1327-52” or DTC“U1327-54” detected?

YES>>

Perform diagnosis of applicable. Refer to the following.


- U1327-52: Refer to [DTC Diagnosis Procedure](#).

- U1327-54: Refer to [DTC Description](#).

NO>>

[GO TO 2.](#)

2. CHECK MAC DIAGNOSIS

 With CONSULT

1. Power switch ON.
2. Perform “MAC Diagnosis” mode of “ICC/ADAS 2” using CONSULT.

Is “U2443-57” 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

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
C1F59	04	EPS control unit (Electric power steering control unit)	Diagnosis condition	<ul style="list-style-type: none"> When vehicle is READY When MAIN switch of ProPILOT Assist 2.0 system is ON
			Signal (terminal)	CAN communication signal
			Threshold	If the EPS control unit is malfunction
			Diagnosis delay time	1 second or less

POSSIBLE CAUSE

- EPS control unit
- ADAS control unit 2

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

*1: ProPILOT Assist 2.0 display is green

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CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC “C1F59-04” 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. Turn the MAIN switch of ProPILOT Assist 2.0 system ON.
3. Perform “All DTC Reading” with CONSULT.
4. Check if the “C1F59-04” is detected as the current malfunction in “Self Diagnostic Result” of “ICC/ADAS 2”.

Is “C1F59-04” 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

1. CHECK DTC PRIORITY

If DTC “C1F59-04” is displayed with Network-DTC, first diagnose the Network-DTC.

Is applicable DTC detected?

YES>>

Perform diagnosis of applicable. Refer to [DTC Index](#)(Without ProPILOT Assist 2.0) or [DTC Index](#)(With ProPILOT Assist 2.0).

NO>>

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2. PERFORM SELF-DIAGNOSIS OF EPS CONTROL UNIT

Check if any DTC is detected in “Self Diagnostic Result” of “EPS/DAST 3”.

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](#)(Without ProPILOT Assist 2.0) or [Removal and Installation](#)(With ProPILOT Assist 2.0).

DTC DETECTION LOGIC

DTC		CONSULT screen terms (Trouble diagnosis content)	DTC detection condition	
C1F59	04	EPS control unit (Electric power steering control unit)	Diagnosis condition	<ul style="list-style-type: none"> When vehicle is READY When MAIN switch of ProPILOT Assist system is ON
			Signal (terminal)	CAN communication signal
			Threshold	If the EPS control unit is malfunction
			Diagnosis delay time	1 second or less

POSSIBLE CAUSE

- EPS control unit
- ADAS control unit 2

FAIL-SAFE

The following systems are canceled.

- Vehicle-to-vehicle distance control mode
- Conventional (fixed speed) cruise control mode
- Steering assistance function
- AEB
- RAB
- I-FCW
- I-LI
- I-BSI
- TSR
- I-DA

CONFIRMATION PROCEDURE

1. CHECK DTC PRIORITY

If DTC “C1F59-04” is displayed with Network-DTC, first diagnose the Network-DTC.

Is applicable DTC detected?

YES>>

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

NO>>