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2015 Nissan Sentra Repair Manual & Service Guide

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SIEMD-7198886

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
U214F	87	CAN communication error (BCM)	Diagnosis condition	Power switch ON
			Signal (terminal)	CAN communication
			Threshold	Electric shift control module cannot transmit or receive CAN communication signals from BCM.
			Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

- Harness or connectors

  (Open or short-circuit of the CAN communication line)
- CAN bus of electric shift control module
- BCM

FAIL-SAFE

No impact to vehicle behavior

1. PRECONDITIONING

If another DTC “Confirmation Procedure” was performed immediately before this task, make sure to OFF the power switch, exit the vehicle and close all doors (including the back door), and wait for at least 60 seconds until the combination meter OFF before starting the next test.

CAUTION:
While waiting, never operate the vehicle such as locking, opening, and closing doors. If operating it, results in the activation of ACC power supply according to the auto ACC function.

NOTE:
After the power switch OFF, there is time needed for data writing by the electric shift control module.

>>

GO TO 2.

2. CHECK FOR DTC DETECTION

With CONSULT

1. Set the power switch to ON and wait at least 5 seconds.
2. Perform self-diagnosis for “SHIFT”.
    - If more than one DTC is detected, also perform diagnosis based on the DTC Inspection Priority Chart (Refer to DTC Inspection Priority Chart.).

Is "U214F-87" detected?

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

DTC Diagnosis Procedure

SIEMD-7198888

For the trouble diagnosis procedure, Refer to Trouble Diagnosis Flow Chart.

SIEMD-7198889

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
U215B	86	CAN communication error (IPDM E/R)	Diagnosis condition	Power switch ON
			Signal (terminal)	CAN communication
			Threshold	Invalid CAN communication signal from IPDM E/R was received.
			Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

- Harness or connectors

  (Open or short-circuit of the CAN communication line)
- CAN bus of electric shift control module
- IPDM E/R

FAIL-SAFE

No impact to vehicle behavior

SIEMD-7198890

1. PRECONDITIONING

If another DTC “Confirmation Procedure” was performed immediately before this task, make sure to OFF the power switch, exit the vehicle and close all doors (including the back door), and wait for at least 60 seconds until the combination meter OFF before starting the next test.

CAUTION:
While waiting, never operate the vehicle such as locking, opening, and closing doors. If operating it, results in the activation of ACC power supply according to the auto ACC function.

NOTE:
After the power switch OFF, there is time needed for data writing by the electric shift control module.

>>

GO TO 2.

2. CHECK FOR DTC DETECTION

With CONSULT

1. Set the power switch to ON and wait at least 5 seconds.
2. Perform self-diagnosis for “SHIFT”.
    - If more than one DTC is detected, also perform diagnosis based on the DTC Inspection Priority Chart (Refer to DTC Inspection Priority Chart.).

Is "U215B-86" detected?

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

DTC Diagnosis Procedure

SIEMD-7198891

For the trouble diagnosis procedure, Refer to Trouble Diagnosis Flow Chart.

SIEMD-7198892

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
U215B	87	CAN communication error (IPDM E/R)	Diagnosis condition	Power switch ON
			Signal (terminal)	CAN communication
			Threshold	Electric shift control module cannot transmit or receive CAN communication signals from IPDM E/R.
			Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

- Harness or connectors

  (Open or short-circuit of the CAN communication line)
- CAN bus of electric shift control module
- IPDM E/R
- Open of the power ON signal circuit of electric shift control module

FAIL-SAFE

No impact to vehicle behavior

1. PRECONDITIONING

If another DTC “Confirmation Procedure” was performed immediately before this task, make sure to OFF the power switch, exit the vehicle and close all doors (including the back door), and wait for at least 60 seconds until the combination meter OFF before starting the next test.

CAUTION:
While waiting, never operate the vehicle such as locking, opening, and closing doors. If operating it, results in the activation of ACC power supply according to the auto ACC function.

NOTE:
After the power switch OFF, there is time needed for data writing by the electric shift control module.

>>

GO TO 2.

2. CHECK FOR DTC DETECTION

With CONSULT

1. Set the power switch to ON and wait at least 5 seconds.
2. Perform self-diagnosis for “SHIFT”.
    - If more than one DTC is detected, also perform diagnosis based on the DTC Inspection Priority Chart (Refer to DTC Inspection Priority Chart.).

Is "U215B-87" detected?

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

SIEMD-7198894

1. CHECK POWER ON SIGNAL CIRCUIT

1. Power switch OFF.
2. Disconnect electric shift control module harness connector.
3. Check the voltage between electric shift control module harness connector and ground.

+		-	Condition	Voltage
Electric shift control module				
Connector	**Terminal**			
M202	9	Ground	Power switch: ON	9 – 16 V
			Power switch: OFF	Approx. 0 V

Is the inspection result normal?

YES>>

GO TO 3.

NO>>

GO TO 2.

2. DETECT MALFUNCTIONING ITEMS

Check the following items:

- Harness for short or open between electric shift control module harness connector terminal 9 and fuse block (J/B) harness connector terminal 91
- 10A fuse (#3)

Is the inspection result normal?

YES>>

GO TO 3.

NO>>

Repair or replace the error-detected parts.

3. CHECK ELECTRIC SHIFT CONTROL MODULE GROUND CIRCUIT

1. Power switch OFF.
2. Check continuity between electric shift control module harness connector and ground.

Electric shift control module		—	Continuity
Connector	**Terminal**		
M202	3	Ground	Existed
	4		
	6		
M203	25		