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2013 NISSAN Frontier OEM Service and Repair Workshop Manual

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DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
P30E5	87	Drive Motor B Coolant Pump Control	Diagnosis condition	READY state
			Signal	Rear traction motor oil pump signal
			Threshold	An error was detected in LIN communication at the rear traction motor oil pump.
			Diagnosis delay time	Within 10 seconds

POSSIBLE CAUSE

- Wiring harness or connector
(Disconnection or short circuit in the oil temperature sensor of the rear traction motor)
(Disconnection or short circuit in the oil pump of the rear traction motor)
- Rear traction motor
(Oil temperature sensor of the rear traction motor)
(Oil pump of the rear traction motor)
- Inverter (rear)

FAIL-SAFE

The driving torque of the rear traction motor is limited to 30%.

1. PREPARATION BEFORE OPERATION

If another "Confirmation Procedure" was performed immediately before this task, always power switch OFF exit the vehicle and close all doors (including the back door), and wait for at least 60 seconds until the combination meter turns off before starting the next test.

CAUTION:

While waiting, never operate the vehicle such as locking, opening, and closing doors. Violation of this caution results in the activation of ACC power supply according to the auto ACC function.

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2. PERFORM THE DTC CONFIRMATION PROCEDURE

 With CONSULT

1. Set the vehicle to READY and wait for at least 10 seconds.
2. Check the DTC.

Is "P30E5-87" 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

1. CHECK FOR DTC RELATED TO THE REAR TRACTION MOTOR OIL TEMPERATURE SENSOR

 With CONSULT

1. Power switch ON.
2. Check "Self Diagnostic Result" of "REAR MOTOR CONTROL".

Is a DTC related to the rear traction motor oil temperature sensor detected?

YES>>

Inspect the oil temperature sensor circuit of the rear traction motor. Refer to [.Diagnosis Procedure](#)

NO>>

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2. INSPECTION OF THE OIL PUMP CIRCUIT OF THE REAR TRACTION MOTOR

Inspect the oil pump circuit of the rear traction motor. Refer to [Diagnosis Procedure](#).

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INSPECTION END

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
P3081	44	Resolver Offset Value Error	Diagnosis condition	At inverter (rear) start
			Signal	—
			Threshold	Any of the following was detected. <ul style="list-style-type: none"> An error in the value written to internal memory No data was written to internal memory An error value was written during work for writing to internal memory
			Diagnosis delay time	Within 1 second

POSSIBLE CAUSE

- Inverter (rear)
- Resolver offset value was not written or there was an error in the work.

FAIL-SAFE

Change the resolver offset value to the default value. This reduces torque because optimal control of the rotor position is not possible.

1. PREPARATION BEFORE OPERATION

If another "Confirmation Procedure" was performed immediately before this task, always power switch OFF exit the vehicle and close all doors (including the back door), and wait for at least 60 seconds until the combination meter turns off before starting the next test.

CAUTION:

While waiting, never operate the vehicle such as locking, opening, and closing doors. Violation of this caution results in the activation of ACC power supply according to the auto ACC function.

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2. PERFORM THE DTC CONFIRMATION PROCEDURE

 With CONSULT

1. Power switch ON and wait at least 10 seconds.
2. Check the DTC.

Is "P3081-44" 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

1. WRITING THE RESOLVER OFFSET VALUE

1. Perform the work to write the resolver offset value. Refer to [Description](#).
2. Perform the DTC CONFIRMATION PROCEDURE. Refer to [Confirmation Procedure](#).

Is "P3081-44" detected?

YES>>

Replace the inverter (rear). Refer to [Removal and Installation](#).

NO>>

INSPECTION END

Sample

DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
P0A1C	01	Drive Motor B Control Module	Diagnosis condition	At inverter (rear) start
			Signal	—
			Threshold	An error was detected related to the controller inside the inverter (rear).
			Diagnosis delay time	Within 1 second

POSSIBLE CAUSE

Inverter (rear)

FAIL-SAFE

Control of the rear traction motor stops. Or, the vehicle cannot be started (READY status cannot be achieved).

1. PREPARATION BEFORE OPERATION

If another "Confirmation Procedure" was performed immediately before this task, always power switch OFF exit the vehicle and close all doors (including the back door), and wait for at least 60 seconds until the combination meter turns off before starting the next test.

CAUTION:

While waiting, never operate the vehicle such as locking, opening, and closing doors. Violation of this caution results in the activation of ACC power supply according to the auto ACC function.

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2. PERFORM THE DTC CONFIRMATION PROCEDURE

 With CONSULT

1. Power switch ON and wait at least 10 seconds.
2. Check the DTC.

Is "P0A1C-01" 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

1. REPLACEMENT OF THE INVERTER (REAR)

Replace the inverter (rear). Refer to [Removal and Installation](#).

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END

Sample