

# Your Ultimate Source for OEM Repair Manuals

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2012 NISSAN 370Z Roadster OEM Service and Repair Workshop Manual

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# **DTC Description**

DTC		CONSULT screen terms	DTC detecting condition		
	00	Battery pack pressure sensor	Diagnosis condition	Always	
P172D			Signal	Battery pack pressure sensor 2 signal	
			Threshold	Detect open circuit of the battery pack pressure sensor 2 circuit, or receive malfunction signal from the battery pack pressure sensor 2.	
			Detection time	More than 1 second	

# **POSSIBLE CAUSE**

- Battery pack pressure sensor 2
- Harness and connector (Battery pack pressure sensor 2 circuit is open or shorted to ground)

# **FAIL-SAFE**

Not applicable



## 1. CHECK DTC PRIORITY

If DTC P172D-00 is displayed with P0A7E-F1, first perform the trouble diagnosis for P0A7E-F1.

#### Is applicable DTC detected?

YES>>

Perform trouble diagnosis for applicable DTC. Refer to DTC Description.

NO>>

GO TO 2.

#### 2. PRECONDITIONING

1. Press the power switch for at least 2 seconds to turn the high voltage system OFF and then check that the charging status indicator is not illuminated.



#### NOTE:

When the high voltage system is turned ON, the charging status indicator blinks green with a frequency of 1 second.

2. After the high voltage system is turned OFF, open the driver's side door, get out of the vehicle, close the driver's side door and wait for at least 5 minutes.

#### **CAUTION:**

• Since the auto ACC function causes the accessory power to be turned ON, do not perform any vehicle operation including locking the doors or opening and closing of the doors during the standby state.

If an operation is performed, wait an additional 5 minutes from that time.

• Check that 12V battery voltage is 11 V or more.

>>

GO TO 3.

# 3. PERFORM DTC CONFIRMATION PROCEDURE

- (II) With CONSULT
  - 1. Power switch ON and wait at least 10 seconds.
  - 2. Check self-diagnostic result in "EV/HEV".

#### Is DTC 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 DTC PRIORITY

If DTC P172D-00 is displayed with P0A7E-F1, first perform the trouble diagnosis for P0A7E-F1.

Is applicable DTC detected?

YES>>

Perform trouble diagnosis for applicable DTC. Refer to DTC Description.

NO>>

GO TO 2.

# 2. CHECK BATTERY PACK PRESSURE SENSOR 1

Check battery pack pressure sensor 1. Refer to <u>Diagnosis Procedure</u> (66kWh Li-ion Battery) or <u>Diagnosis Procedure</u> (91kWh Li-ion Battery).

Is the inspection result normal?

YES>>

INSPECTION END

NO>>

Repair or replace error-detected parts.

# DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detecting condition		
	96	Battery pack pressure sensor	Diagnosis condition	Always	
P172D			Signal	Battery pack pressure sensor 2 signal	
			Threshold	A malfunction signal from battery pack pressure sensor 2 is received	
			Detection time	More than 1 second	

# **POSSIBLE CAUSE**

Battery pack pressure sensor 2

# **FAIL-SAFE**

Not applicable



# 1. PRECONDITIONING

1. Press the power switch for at least 2 seconds to turn the high voltage system OFF and then check that the charging status indicator is not illuminated.



When the high voltage system is turned ON, the charging status indicator blinks green with a frequency of 1 second.

2. After the high voltage system is turned OFF, open the driver's side door, get out of the vehicle, close the driver's side door and wait for at least 5 minutes.

#### **CAUTION:**

• Since the auto ACC function causes the accessory power to be turned ON, do not perform any vehicle operation including locking the doors or opening and closing of the doors during the standby state.

If an operation is performed, wait an additional 5 minutes from that time.

• Check that 12V battery voltage is 11 V or more.

>>

# GO TO 2.

# 2. PERFORM DTC CONFIRMATION PROCEDURE

- (I) With CONSULT
  - 1. Power switch ON and wait at least 10 seconds.
  - 2. Check self-diagnostic result in "EV/HEV".

#### Is DTC 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 BATTERY PACK PRESSURE SENSOR 2

Check battery pack pressure sensor 2. Refer to <u>Diagnosis Procedure</u>(66kWh LI-ION BATTERY), <u>Diagnosis Procedure</u>(91kWh LI-ION BATTERY).

Is the inspection result normal?

YES>>

INSPECTION END

NO>>

Repair or replace error-detected parts.



# **DTC DETECTION LOGIC**

DTC		CONSULT screen terms	DTC detecting condition		
		Battery coolant heater connect	Diagnosis condition	Always	
P1001	78		Signal	Battery coolant heater connector engagement detection signal	
			Threshold	The Li-ion battery high voltage connector going to the battery coolant heater is detected to not be engaged	
			Detection time		

# **POSSIBLE CAUSE**

Battery coolant heater high voltage connector connection trouble

# **FAIL-SAFE**

A/C control is stopped (When vehicle is stopped)



# 1. PRECONDITIONING

1. Press the power switch for at least 2 seconds to turn the high voltage system OFF and then check that the charging status indicator is not illuminated.



When the high voltage system is turned ON, the charging status indicator blinks green with a frequency of 1 second.

2. After the high voltage system is turned OFF, open the driver's side door, get out of the vehicle, close the driver's side door and wait for at least 5 minutes.

#### **CAUTION:**

• Since the auto ACC function causes the accessory power to be turned ON, do not perform any vehicle operation including locking the doors or opening and closing of the doors during the standby state.

If an operation is performed, wait an additional 5 minutes from that time.

• Check that 12V battery voltage is 11 V or more.

>>

# GO TO 2.

# 2. PERFORM DTC CONFIRMATION PROCEDURE

- (E) With CONSULT
  - 1. Power switch ON and wait at least 10 seconds.
  - 2. Check self-diagnostic result in "EV/HEV".

#### Is DTC 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

#### **WARNING:**

Hybrid vehicles and electric vehicles equipped with high voltage batteries may cause an electric shock or a short circuit if handled in an inappropriate way. When you inspect and service a vehicle, follow the work procedure and perform the correct tasks.

#### **WARNING:**

- When you inspect and service the high voltage wiring harnesses and components, make sure to remove the service plug in order to shut off the high voltage circuit.
- When you have removed the service plug, be sure to carry it in your pocket, or store it in the tool box in order to keep someone from accidentally connecting it during work.
- When performing high voltage system operation, be sure to wear insulating protective equipment.
- During tasks involving high voltage systems, clarify a person in charge of the tasks and do not let others touch the vehicle. When the vehicle is not being serviced, use protective items such as an electric-proof cover sheet for covering the high voltage components so as to keep someone from accidentally touching the vehicle.
- Refer to HIGH VOLTAGE PRECAUTIONS: Precautions.

#### **CAUTION:**

- Setting the vehicle to the READY state with the service plug removed may cause malfunctioning. Avoid setting the vehicle to the READY state unless otherwise specified in the service manual.
- When you turned the power switch ON with the service plug removed, be sure to erase all the DTCs after trouble diagnosis.

## 1. CHECK CAN COMMUNICATION CIRCUIT

Perform trouble diagnosis for CAN communication circuit. Refer to Trouble Diagnosis Flow Chart.

Is the inspection result normal?

YES>>

GO TO 2.

NO>>

Repair or replace error-detected parts.

## 2. PERFORM SELF-DIAGNOSIS OF VCM

Check self-diagnostic result in "EV/HEV".

Is DTC detected other than P1001–78?

YES>>

Perform diagnosis for detected DTC. Refer to <u>DTC Index</u>.

NO>>

<u>GO TO 3</u>.

## 3. PERFORM SELF-DIAGNOSIS OF LBC