

# Your Ultimate Source for OEM Repair Manuals

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1984 NISSAN 300 ZX OEM Service and Repair Workshop Manual

Go to manual page

Click link to Wiring Diagram.



# DETAILS OF TROUBLE DIAGNOSIS FLOWCHART

# 1. COLLECT THE INFORMATION FROM THE CUSTOMER

It is also important to clarify customer concerns before starting the inspection. First of all, perform an interview utilizing diagnostic work sheet and reproduce the symptom as well as fully understand it. Depending on the situations, drive the vehicle with the customer and check the symptom. Refer to <u>Diagnostic Work Sheet</u>.

### **CAUTION:**

Customers are not professional. Never guess easily like "maybe the customer means that...," or "maybe the customer mentions this symptom".

>>

GO TO 2.

# 2. CHECK SYMPTOM

Reproduce the symptom that is indicated by the customer, based on the information from the customer obtained by the interview. Also check that the symptom is not caused by fail-safe mode. Refer to <u>Fail-safe</u>.

### **CAUTION:**

When the symptom is caused by normal operation, fully inspect each portion and obtain the understanding of customer that the symptom is not caused by a malfunction.

>>

GO TO 3.

# 3. PERFORM SELF-DIAGNOSIS (1)

**(H)**With CONSULT

Perform self-diagnosis.

Is DTC detected?

YES>>

Record or print self-diagnosis results and freeze frame data (FFD). GO TO 4.

NO>>

GO TO 7.

# 4. PERFORM SELF-DIAGNOSIS (2)

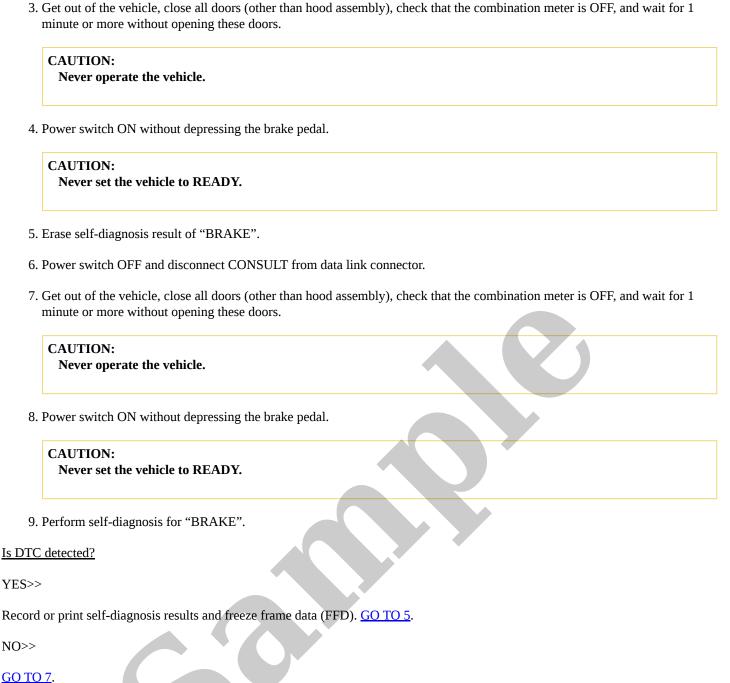
**(E)**With CONSULT

1. Power switch OFF to ON without depressing the brake pedal.

# **CAUTION:**

Never set the vehicle to READY.

2. Power switch OFF and disconnect CONSULT from data link connector.



# 5. RECHECK SYMPTOM

# With CONSULT

- 1. Erase self-diagnosis results from the memory.
- 2. Power switch OFF and disconnect CONSULT from data link connector.
- 3. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

# **CAUTION:**

Never operate the vehicle.

4. Perform DTC reproduction procedures for the system that is malfunctioning.



When multiple DTCs are detected, refer to DTC Inspection Priority Chart. And then determine the order for performing the diagnosis.

YES>>
<u>GO TO 6</u> .
NO>>
Check harness and connectors based on the information obtained by the interview. Refer to <u>Intermittent Incident</u> .
6. REPAIR OR REPLACE ERROR-DETECTED PART
1. Repair or replace the part that is malfunctioning. Reconnect part or connector after repairing or replacing. Erase DTC from the memory when DTC is detected.
2. Power switch OFF and disconnect CONSULT from data link connector.
3. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.
CAUTION: Never operate the vehicle.
>>
<u>GO TO 7.</u>
7. IDENTIFY ERROR-DETECTED SYSTEM BY SYMPTOM DIAGNOSIS
Estimate which system is malfunctioning according to the possible symptoms based on symptom diagnosis and perform check.
Can the malfunctioning part be identified?
YES>>
<u>GO TO 8.</u>
NO>>
Check harness and connectors based on the information obtained by the interview. Refer to <u>Intermittent Incident</u> .
8. FINAL CHECK
With CONSULT
1. Check the reference value for "BRAKE". Refer to <u>Values On The Diagnosis Tool</u> .
2. Perform the operation check. Check that the symptom is not reproduced under the same conditions as when the symptom is reproduced before.
<u>Is the symptom reproduced?</u>
YES>>

<u>GO TO 3.</u>

NO>>

INSPECTION END

# **Description**

- In general, customers have their own criteria for a symptom. Therefore, it is important to understand the symptom and status well enough by interviewing the customer about the symptom carefully. To systemize all the information for the diagnosis, prepare the interview sheet referring to the interview points.
- In some cases, multiple conditions that appear simultaneously may cause a DTC to be detected.

# **INTERVIEW SHEET SAMPLE**

Interview sheet					
Customer name	MR/MS	Registration number	Initial year registration		
		Vehicle type	VIN		
Storage date		Traction motor	Mileage	km ( Mile)	
Symptom		□ Does not operate (		) function	
		☐ Warning lamp for (		) turns ON.	
		□ Noise □ Vibration			
		□ Other(		)	
First occurrence		□ Recently □ Other (		)	
Frequency of occurrence		$\square$ Always $\square$ Under a certain conditions of $\square$ Sometimes ( time(s)/day)			
Climate conditions		□ Irrelevant			
	Weather	$\square$ Fine $\square$ Cloud $\square$ Rain $\square$ Snow $\square$ Others (			
	Temperature	$\square$ Hot $\square$ Warm $\square$ Cool $\square$ Cold $\square$ Temperature [Approx. °C ( °F)			
	Relative humidity	□ High □ Moderate □ Low			
Road conditions		□ Urban area □ Suburb area □ Highway			
Road Coliditions		□ Mountainous road (uphill or downhill) □ Rough road			
		□Irrelevant			
Operating condition, etc.		□When traction motor starts □ During idling			
		□ During driving □ During acceleration □ At constant speed driving			
		□ During deceleration			
		□ During cornering (right curve or left curve)			
		□ When steering wheel is steered (to right or to left)			
Other conditions					
Memo					

Vehicle specification needs to be written with CONSULT because it is not written after replacing the electrically-driven intelligent brake unit.

For details the operation, refer to "CONSULT Operation Manual".

# **Work Procedure (After Replace Electrically-Driven Intelligent Brake Unit)**

# 1. WRITING VEHICLE SPECIFICATION



Perform writing vehicle specification to electrically-driven intelligent brake unit according to "Replace ECU" in CONSULT Operation Manual.

>>

# GO TO 2.

# 2. PERFORM NECESSARY WORK

# **(II)**With CONSULT

- 1. Perform air bleeding. Refer to BRAKE FLUID: Air Bleeding.
- 2. Perform self-diagnosis for "All DTC Reading".
- 3. Erase the memory of self-diagnosis results.

>>

# WORK END



The vehicle jerks when VDC function, TCS function, ABS function, EBD function, hill start assist function, brake limited slip differential (BLSD) function, brake assist function, brake force distribution function, or trailer sway control function operates.

# 1. CHECK SYMPTOM

Check the whether or not the vehicle jerks when VDC function, TCS function, ABS function, EBD function, hill start assist function, brake limited slip differential (BLSD) function, brake assist function, brake force distribution function, or trailer sway control function operates.

Is the inspection result normal?

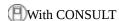
YES>>

Normal

NO>>

GO TO 2.

# 2. PERFORM SELF-DIAGNOSIS



1. Power switch OFF to ON without depressing the brake pedal.

### **CAUTION:**

Never set the vehicle to READY.

- 2. Power switch OFF and disconnect CONSULT from data link connector.
- 3. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

### **CAUTION:**

Never operate the vehicle.

4. Power switch ON without depressing the brake pedal.

### **CAUTION:**

Never set the vehicle to READY.

- 5. Erase self-diagnosis result for "BRAKE".
- 6. Power switch OFF and disconnect CONSULT from data link connector.
- 7. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.

### **CAUTION:**

Never operate the vehicle.

8. Power switch ON without depressing the brake pedal.

# **CAUTION:**

Never set the vehicle to READY.

9. Perform self-diagnosis for "BRAKE".

Check the DTC. Refer to <u>DTC Index</u> .
NO>>
Perform symptom diagnosis for VDC function, TCS function, ABS function, EBD function, hill start assist function, brake limited slip differential (BLSD) function, brake assist function, brake force distribution function, or trailer sway control function. Refer to <a href="Diagnosis Procedure">Diagnosis Procedure</a> . GO TO 3.
3. CHECK CONNECTOR
With CONSULT
1. Power switch OFF and disconnect CONSULT from data link connector.
2. Get out of the vehicle, close all doors (other than hood assembly), check that the combination meter is OFF, and wait for 1 minute or more without opening these doors.
CAUTION: Never operate the vehicle.
3. Disconnect 12V battery cable from negative terminal.
4. Disconnect electrically-driven intelligent brake unit harness connector.
5. Disconnect ABS actuator and electric unit (control unit) harness connector.
6. Check the connector terminal for deformation, disconnection, or looseness.
7. Connect electrically-driven intelligent brake unit harness connector.
8. Connect ABS actuator and electric unit (control unit) harness connector.
9. Perform self-diagnosis for "BRAKE" again.
Is the inspection result normal?
YES>>
<u>GO TO 4</u> .
NO>>
Poor connection of connector terminal. Repair or replace connector terminal.
4. CHECK VCM SELF DIAGNOSIS RESULT ITEMS
With CONSULT
Perform self-diagnosis for "EV/HEV".
Is any DTC detected?
YES>>
Check the DTC. Refer to <u>DTC Index</u> .
NO>>
Replace ABS actuator and electric unit (control unit). Refer to <u>ABS ACTUATOR AND ELECTRIC UNIT (CONTROL UNIT):</u> Removal & Installation.

Is any DTC detected?

YES>>

Symptom	Result		
The brake pedal may move during braking.			
When the brake pedal is depressed while the power switch is OFF, an operating sound may occur or the pedal stroke may feel short.	This occurs when the electrically-		
There may be an operating noise or the brake pedal may move after the brake pedal is operated.	driven intelligent brake unit is operating normally and is not a		
An operating noise may occur when the power switch is turned OFF (system stop sound).	malfunction.		
The brake pedal may move when ABS is activated immediately after the READY state of the vehicle.			
After turning the power switch OFF and waiting for a few minutes in the car (with all doors closed and brake pedal not depressed), the electrically-driven intelligent brake unit goes into sleep mode. If the brake pedal is depressed after the unit goes into sleep mode, the brake pedal operation may be felt awkward or the depth of pedal depression insufficient for a little while.	This is not a malfunction. Depress the brake pedal fully.		

