

# Your Ultimate Source for OEM Repair Manuals

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2015 NISSAN Teana OEM Service and Repair Workshop Manual

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# **1. CHECK P POSITION SWITCH INPUT VOLTAGE**

## (E) With CONSULT

- 1. Set the vehicle to READY.
- 2. Select "Data Monitor" in "SHIFT".
- 3. Select "P position switch 1 voltage" and "P position switch 2 voltage".
- 4. Operate the P position switch and measure the input voltage to the electric shift control module.

#### CAUTION:

Perform the operation safely with the wheels blocked, the brake pedal depressed, and the vehicle stopped.

Monitor item	Condition	Value/Status
P position switch 1 voltage	P position switch: Pressed	1.1 - 2.1 V
P position switch 1 voltage	P position switch: Released	2.7 - 3.2 V
P position switch 2 voltage	P position switch: Pressed	2.7 - 3.2 V
r position switch 2 voltage	P position switch: Released	1.1 - 2.1 V

#### Without CONSULT

- 1. Set the vehicle to READY.
- 2. Operate the P position switch and check the voltage between electric shift control module harness connector and ground.

#### **CAUTION:**

Perform the operation safely with the wheels blocked, the brake pedal depressed, and the vehicle stopped.

P position switch	+ Electric shift control module		_	Condition	Voltage
r position on the				Condition	
	Connector	Terminal			
No 1	No.1 46	46	Ground	P position switch: Pressed	1.4 - 2.0 V
110.1		40		P position switch: Released	2.8 - 3.2 V
No.2		47		P position switch: Pressed	2.8 - 3.2 V
110.2		47		P position switch: Released	1.4 - 2.0 V

**W**NOTE:

There may be a difference between the value measured with a circuit tester and the CONSULT monitor value.

#### Is the inspection result normal?

YES>>

#### INSPECTION END

NO>>

## 2. CHECK THE CIRCUIT BETWEEN ELECTRIC SHIFT CONTROL MODULE AND P POSITION SWITCH (SENSOR SIGNAL CIRCUIT)

1. Power switch OFF.

2. Disconnect electric shift selector harness connector.

3. Disconnect electric shift control module harness connector.

4. Check the resistance between electric shift control module harness connector and electric shift selector harness connector.

	P position switch	Electric shift control	Electric shift control module		Electric shift selector	
	r position switch	Connector	Terminal	Connector	Terminal	Resistance
ſ	No.1	M203	46	MOOO	6	1 O or loss
	No.2	11/205	47	M200	18	$1 \Omega$ or less

Is the inspection result normal?

YES>>

#### <u>GO TO 3</u>.

NO>>

Repair or replace the error-detected parts.

# **3. REPLACE ELECTRIC SHIFT SELECTOR**

1. Replace the electric shift selector. Refer to **ELECTRIC SHIFT SELECTOR** : Removal & Installation.

2. Connect all of disconnected connectors.

3. Perform DTC "Confirmation Procedure". Refer to Confirmation Procedure.

Is "P0850-00" detected again?

YES>>

Replace electric shift control module. Refer to ELECTRIC SHIFT CONTROL MODULE : Removal & Installation.

NO>>

INSPECTION END

# DTC DETECTION LOGIC

DTC		CONSULT screen terms		DTC detection condition
			Diagnosis condition	READY
			Signal (terminal)	P position switch input signal
P0851	00	Park/Neutral Switch	Threshold	<ul> <li>The input voltage of P position switch No.1 and No.2 was continuously the following state.</li> <li>Input voltage ≤ 0.6 V</li> </ul>
			Diagnosis delay time	2.4 seconds or more

# **POSSIBLE CAUSE**

- Electric shift selector (P position switch)
- Electric shift control module
- Harness or connectors (P position switch circuit is shorted to ground.)

# FAIL-SAFE

Does not shift to P position even when the P position switch is pressed.

# **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.

# WNOTE:

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

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#### <u>GO TO 2</u>.

## 2. CHECK FOR DTC DETECTION

#### With CONSULT

- 1. Set the vehicle to READY.
- 2. Press the P position switch to shift to the P position and wait for at least 5 seconds. (Press the P position for at least 1 second.)
- 3. Perform self-diagnosis for "SHIFT".
  - If more than one DTC is detected, also perform diagnosis based on the DTC Inspection Priority Chart (Refer to <u>DTC</u> <u>Inspection Priority Chart.</u>).

Is "P0851-00" detect?

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 P POSITION SWITCH INPUT VOLTAGE**

### (E) With CONSULT

- 1. Set the vehicle to READY.
- 2. Select "Data Monitor" in "SHIFT".
- 3. Select "P position switch 1 voltage" and "P position switch 2 voltage".
- 4. Operate the P position switch and measure the input voltage to the electric shift control module.

#### CAUTION:

Perform the operation safely with the wheels blocked, the brake pedal depressed, and the vehicle stopped.

Monitor item	Condition	Value/Status
P position switch 1 voltage	P position switch: Pressed	1.1 - 2.1 V
P position switch 1 voltage	P position switch: Released	2.7 - 3.2 V
P position switch 2 voltage	P position switch: Pressed	2.7 - 3.2 V
r position switch 2 voltage	P position switch: Released	1.1 - 2.1 V

#### Without CONSULT

- 1. Set the vehicle to READY.
- 2. Operate the P position switch and check the voltage between electric shift control module harness connector and ground.

#### **CAUTION:**

Perform the operation safely with the wheels blocked, the brake pedal depressed, and the vehicle stopped.

	+ Electric shift control module				Voltage	
P position switch			-	Condition		
	Connector	Connector Terminal				
No 1	No.1 46		P position switch: Pressed	1.4 - 2.0 V		
110.1		40	Ground	P position switch: Released	2.8 - 3.2 V	
No.2		47	Giouna	P position switch: Pressed	2.8 - 3.2 V	
190.2	47		P position switch: Released	1.4 - 2.0 V		

**P**NOTE:

There may be a difference between the value measured with a circuit tester and the CONSULT monitor value.

#### Is the inspection result normal?

YES>>

#### INSPECTION END

NO>>

## 2. P POSITION SWITCH POWER SUPPLY INSPECTION

- 1. Power switch ON.
- 2. Check the voltage between electric shift selector harness connector and ground.

+			Voltage	
Electric shift selector		-		
Connector	Terminal			
M200	1	Ground	Approx. 5 V	
WI200	13	Gibana	Approx. 5 V	

Is the inspection result normal?

YES>>

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<u>GO TO 4</u>.
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NO>>

<u>GO TO 3</u>.

## 3. CHECK THE CIRCUIT BETWEEN ELECTRIC SHIFT CONTROL MODULE AND P POSITION SWITCH (SENSOR POWER CIRCUIT)

- 1. Power switch OFF.
- 2. Disconnect electric shift selector harness connector.
- 3. Disconnect electric shift control module harness connector.
- 4. Check the continuity between electric shift control module harness connector and electric shift selector harness connector.

Electric shift co	ntrol module	Electric shif	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M202	19	M200	1	Existed
M203	48	141200	13	EXISTED

5. Check the continuity between electric shift control module harness connector and ground.

Electric shift co	ntrol module		Continuity	
Connector	Terminal	—	Continuity	
M202	19	Ground	Not existed	
M203	48	Ground	ivot existen	

#### Is the inspection result normal?

YES>>

Replace electric shift control module. Refer to ELECTRIC SHIFT CONTROL MODULE : Removal & Installation.

NO>>

Repair or replace the error-detected parts.

# 4. CHECK P POSITION SWITCH SENSOR GROUND CIRCUIT

1. Power switch OFF.

- 2. Disconnect electric shift selector harness connector.
- 3. Disconnect electric shift control module harness connector.
- 4. Check the continuity between electric shift control module harness connector and electric shift selector harness connector.

Electric shift control module		Electric shi	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
N1202	41	M200	12	E-victo d
M203	50	M200	24	Existed

5. Check the continuity between electric shift control module harness connector and ground.

Electric shift control module			Continuity
Connector	Terminal	—	Continuity
M202	41	Cround	Not evicted
M203	50	Ground	Not existed

#### Is the inspection result normal?

YES>>

<u>GO TO 5</u>.

NO>>

Repair or replace the error-detected parts.

# 5. CHECK THE CIRCUIT BETWEEN ELECTRIC SHIFT CONTROL MODULE AND P POSITION SWITCH (SWITCH SIGNAL CIRCUIT)

1. Check the continuity between electric shift control module harness connector and electric shift selector harness connector.

P position switch		Electric shift control	module	Electric shift selector		Continuity
P position swit		Connector	Terminal	Connector	Terminal	Continuity
No.1		M203	46	M200	6	Existed
No.2		W1203	47	101200	18	Existed

2. Check the continuity between electric shift control module harness connector and ground.

P position switch	Electric shift control mode	ule		Continuity
r position switch	Connector	Terminal	—	
No.1	M203	46	Ground	Not existed
No.2	1/1205	47		

3. Check the continuity between electric shift control module harness connector terminals.

P position switch		Continuity			
	Connector	Terminal	Connector	Terminal	Continuity
No.1	M203	46	M203	Except 46	Not existed
No.2	W1205	47		Except 47	

Is the inspection result normal?

Due to the malfunction of the P position switch, replace the electric shift selector. Refer to <u>ELECTRIC SHIFT SELECTOR</u> : <u>Removal & Installation</u>.

NO>>

Repair or replace the error-detected parts.

# DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
P0852 00		Park/Neutral Switch	Diagnosis condition	READY
			Signal (terminal)	P position switch input signal
	00		Threshold	<ul> <li>The input voltage of P position switch No.1 and No.2 was continuously the following state.</li> <li>Input voltage ≥ 4.5 V</li> </ul>
			Diagnosis delay time	2.4 seconds or more

# **POSSIBLE CAUSE**

- Electric shift selector (P position switch)
- Electric shift control module
- Harness or connectors (P position switch circuit is open or shorted to power.)

# FAIL-SAFE

Does not shift to P position even when the P position switch is pressed.