

# Your Ultimate Source for OEM Repair Manuals

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2015 NISSAN Tiida/Versa OEM Service and Repair Workshop Manual

Go to manual page

Check the voltage between parking actuator relay harness connector and ground.

+				
Parking actu	ator relay	-	Voltage	
Connector	Terminal			
E105	1	Currend	0 1CV	
E105	5	Ground	9 – 16 V	

#### Is the inspection result normal?

YES>>

GO TO 5.

NO>>

GO TO 4.

#### 4. DETECT MALFUNCTIONING ITEM

Check the following items:

- Harness for short or open between parking actuator relay and 12V battery.
- 12V battery
- 30A fuse (#100)

<u>Is the inspection result normal?</u>

YES>>

INSPECTION END

NO>>

Repair or replace the error-detected parts.

# 5. CHECK THE CIRCUIT BETWEEN PARKING ACTUATOR AND PARKING ACTUATOR RELAY

Check the continuity between parking actuator harness connector and parking actuator relay harness connector.

Parking actuator		Parking actu	- Continuity	
Connector Terminal		Connector	Terminal	Continuity
F15	2	E105	3	Existed

Is the inspection result normal?

YES>>

GO TO 6.

NO>>

Repair or replace the error-detected parts.

# 6. CHECK THE CIRCUIT BETWEEN ELECTRIC SHIFT CONTROL MODULE AND PARKING ACTUATOR RELAY

1. Check the continuity between electric shift control module harness connector and parking actuator relay harness connector.

Electric shift co	ntrol module	Parking actu	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
M203	33	E105	2	Existed

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

Electric shift con	ntrol module		Continuity
Connector	Connector Terminal		Continuity
M203	33	Ground	Not existed

#### Is the inspection result normal?

YES>>

GO TO 7.

NO>>

Repair or replace the error-detected parts.

#### 7. MOTOR COIL (IN PARKING ACTUATOR) INSPECTION

Check motor coil (in parking actuator). Refer to Component Inspection.

Is the inspection result normal?

YES>>

INSPECTION END

NO>>

Replace reduction gear due to the malfunction of motor coil (in parking actuator). Refer to <u>REDUCTION GEAR</u> : <u>Unit Removal & Installation</u>.

## **DTC DETECTION LOGIC**

DTC	DTC CONSULT screen terms		DTC detection condition		
			Diagnosis condition	Parking actuator is driven when power switch ON.	
			Signal (terminal)	Parking actuator control signal (U-phase, V-phase, W-phase)	
			Of 2 phases (U-phase, V-phase, W-phase) of the parking actuator control signal, 1 of the phases is de-energized.		
P272B	00	Motor Driver Circuit	Threshold	NOTE: Energized: Approx. 0 V  De-energized: 9 - 16 V	
			Diagnosis delay time		

## **POSSIBLE CAUSE**

- Electric shift control module
- Motor coil

(Parking actuator)

• Wiring harness

(12V battery short-circuit)

## **FAIL-SAFE**

- In case of malfunction in the P position: Shifting from the P position to any other position is prohibited.
- In case of malfunction in a position other than the P position: Shifting to the P position is prohibited.

#### 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.



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

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#### GO TO 2.

#### 2. CHECK FOR DTC DETECTION

#### **(II)**With CONSULT

- 1. Set the power switch to ON and wait at least 2 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 <a href="https://doi.org/10.1007/journal.org/">DTC Inspection Priority Chart (Refer to <a href="https://doi.org//>DTC Inspection Priority Chart">DTC Inspection Priority Chart</a> (Refer to <a href="https://doi.org/10.1007/journal.org/">DTC Inspection Priority Chart</a> (Refer to <a href="https://doi.org/10.1007/journal.org/">DTC Inspection Priority Chart</a> (Refer to <a href="https://doi.org/10.1007/journal.org/">DTC Inspection Priority Chart</a> (Refer to <a href="https://doi.org/">DTC Inspection Priority C

#### Is "P272B-00" 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 THE CIRCUIT BETWEEN THE ELECTRIC SHIFT CONTROL MODULE AND MOTOR COIL

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

+			
Electric shift control module		-	Voltage
Connector	Terminal		
	27		
M203	28	Ground	Approx. 0 V
	29		

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

Electric shift co	ntrol module	Parking a	Continuity	
Connector	Terminal	Connector	Terminal	Continuity
	27		1	
M203	28	F15	6	Existed
	29		7	

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YES>>

GO TO 2.

NO>>

Repair or replace the error-detected parts.

#### 2. MOTOR COIL (IN PARKING ACTUATOR) INSPECTION

Check motor coil (in parking actuator). Refer to Component Inspection.

Is the inspection result normal?

YES>>

INSPECTION END

NO>>

Replace reduction gear due to the malfunction of motor coil (in parking actuator). Refer to <u>REDUCTION GEAR</u>: <u>Unit Removal & Installation</u>.

## **DTC DETECTION LOGIC**

DTC		CONSULT screen terms	DTC detection condition		
	P07F2 88 Transmission Range Control Module Communication	Diagnosis condition	Power switch ON		
DO7E2		Signal (terminal)	CAN communication		
F0/F2		Threshold	Error detected during the initial diagnosis of CAN controller of electric shift control module		
		Diagnosis delay time	_		

#### **POSSIBLE CAUSE**

Electric shift control module

#### **FAIL-SAFE**

- In case of malfunction in the P position: Shifting from the P position to any other position is prohibited.
- In case of malfunction in a position other than the P position: Shifting to the P position is prohibited.



#### 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.



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

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#### GO TO 2.

#### 2. CHECK FOR DTC DETECTION

#### **With CONSULT**

- 1. Power switch from OFF to ON and wait 5 seconds or more.
- 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 <a href="https://doi.org/10.1007/journal.org/">DTC Inspection Priority Chart</a>.).

#### Is "P07F2-88" 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 ELECTRIC SHIFT CONTROL MODULE

 $Replace\ electric\ shift\ control\ module.\ Refer\ to\ \underline{ELECTRIC\ SHIFT\ CONTROL\ MODULE\ :\ Removal\ \&\ Installation}.$ 

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END



# **DTC DETECTION LOGIC**

DTC	۲ ٦	CONSULT screen terms	DTC detection condition	
			Diagnosis condition	READY
	Astronom Control	Signal (terminal)	_	
P1890	29	Actuator Control Monitor	Threshold	In response to the instruction of the electric shift control module, the switching of the parking actuator to the position (P position or any position other than the P position) is not completed.
			Diagnosis delay time	5 seconds or more

#### **POSSIBLE CAUSE**

Electric shift control module

#### **FAIL-SAFE**

- In case of malfunction in the P position: Shifting from the P position to any other position is prohibited.
- In case of malfunction in a position other than the P position: Shifting to the P position is prohibited.