

# Your Ultimate Source for OEM Repair Manuals

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## 2015 NISSAN Titan Crew Cab OEM Service and Repair Workshop Manual

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Electric shift sensor	+		-	Condition	Voltage	
	Electric shift control module					
	Connector	Terminal				
No.1	M203	34	Ground	Selector lever: H (home position) and kept in the R and Nr position	1.4 - 2.0 V	
				Other than the above	2.8 - 3.2 V	
No.2				35	Selector lever: H (home position) and kept in the R and Nr position	1.4 - 2.0 V
					Other than the above	2.8 - 3.2 V
No.3				36	Selector lever: H (home position) and kept in the Nr position	1.4 - 2.0 V
					Other than the above	2.8 - 3.2 V
No.4				37	Selector lever: H (home position) and kept in the Nr and Nd position	1.4 - 2.0 V
					Other than the above	2.8 - 3.2 V
No.5	44	Selector lever: H (home position) and kept in the Nr and Nd position	1.4 - 2.0 V			
		Other than the above	2.8 - 3.2 V			
No.6	45	Selector lever: H (home position) and kept in the Nd position	1.4 - 2.0 V			
		Other than the above	2.8 - 3.2 V			
No.7	39	Selector lever: H (home position) and kept in the Nd and D position	1.4 - 2.0 V			
		Other than the above	2.8 - 3.2 V			
No.8	40	Selector lever: H (home position) and kept in the Nd and D position	1.4 - 2.0 V			
		Other than the above	2.8 - 3.2 V			

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## 2. CHECK THE CIRCUIT BETWEEN ELECTRIC SHIFT CONTROL MODULE AND ELECTRIC SHIFT SENSOR

1. Power switch OFF.
2. Disconnect electric shift control module harness connector and electric shift selector harness connector.
3. Check the continuity between electric shift control module harness connector and electric shift selector harness connector of the troubled shift sensor confirmed in the step 1.

Electric shift sensor	Electric shift control module		Electric shift selector		Continuity
	Connector	Terminal	Connector	Terminal	
No.1	M203	34	M200	2	Existed
No.2		35		14	
No.3		36		3	
No.4		37		15	
No.5		44		4	
No.6		45		16	
No.7		39		5	
No.8		40		17	

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

Electric shift sensor	Electric shift control module		—	Continuity
	Connector	Terminal		
No.1	M203	34	Ground	Not existed
No.2		35		
No.3		36		
No.4		37		
No.5		44		
No.6		45		
No.7		39		
No.8		40		

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

Electric shift sensor	Electric shift control module		Electric shift selector		Continuity
	Connector	Terminal	Connector	Terminal	
No.1	M203	34	M200	1, 13	Not existed
No.2		35			
No.3		36			
No.4		37			
No.5		44			
No.6		45			
No.7		39			
No.8		40			

Is the inspection result normal?

YES>>

Due to the malfunction of the electric shift sensor, replace the electric shift selector. Refer to [ELECTRIC SHIFT SELECTOR : Removal & Installation](#).

NO>>

Repair or replace the error-detected parts.

## DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition	
P07ED	00	Transmission Range Multi-function Select	Diagnosis condition	READY
			Signal (terminal)	Electric shift sensor input signal
			Threshold	2 or more of electric shift sensors No.1 to No.8 were detected stuck ON or OFF 5 times or more.
			Diagnosis delay time	—

### POSITION PATTERN

Selector lever position	Electric shift sensor							
	No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	No. 7	No. 8
R	ON	ON	OFF	OFF	OFF	OFF	OFF	OFF
Nr	ON	ON	ON	ON	ON	OFF	OFF	OFF
H	ON	ON	ON	ON	ON	ON	ON	ON
Nd	OFF	OFF	OFF	ON	ON	ON	ON	ON
D/B	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON

### POSSIBLE CAUSE

- Electric shift sensor
- Harness or connectors

(Open or short-circuit of the harness of each circuit)

### FAIL-SAFE

Shift operation is prohibited.

## 1. PRECONDITIONING

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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.
- One characteristic of this DTC is that it is necessary to once set “P07ED-00” as a past malfunction. Therefore, set the power switch to OFF and engage sleep state.



### NOTE:

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

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## 2. CHECK FOR DTC DETECTION

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 With CONSULT

1. Set the vehicle to READY.
2. Select “Data Monitor” in “SHIFT”.
3. Select "Actual shift position".
4. Operate the selector lever as follows. (Keep the selector lever at each shift position for at least 2 seconds.)

### CAUTION:

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

- H → N → R → N → D → N → H

5. Repeat step 4 an additional 5 times.

6. Perform self-diagnosis for “SHIFT”.

- If more than one DTC is detected, also perform diagnosis based on the DTC Inspection Priority Chart (Refer to [DTC Inspection Priority Chart](#)).

Is “P07ED-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

**CAUTION:**

If "P07E9-00", "P07EA-00", or "P07EB-00" is displayed at the same time, also perform diagnosis based on the DTC Inspection Priority Chart. Refer to [DTC Inspection Priority Chart](#).

## 1. ELECTRIC SHIFT SENSOR INPUT SIGNAL INSPECTION

 With CONSULT

1. Set the vehicle to READY.
2. Select "Data Monitor" in "SHIFT".
3. Select "Shift sensor 1" to "Shift sensor 8".
4. Operate the selector lever and confirm the shift sensor in which the value is not switched.

**CAUTION:**

- When "P07ED-00" is detected, the values of multiple shift sensors are not switched.
- Perform the operation safely with the wheels blocked, the brake pedal depressed, and the vehicle stopped.

Monitor item	Condition	Value/Status
Shift sensor 1	Selector lever: H (home position) and kept in the R and Nr position	On
	Other than the above	Off
Shift sensor 2	Selector lever: H (home position) and kept in the R and Nr position	On
	Other than the above	Off
Shift sensor 3	Selector lever: H (home position) and kept in the Nr position	On
	Other than the above	Off
Shift sensor 4	Selector lever: H (home position) and kept in the Nr and Nd position	On
	Other than the above	Off
Shift sensor 5	Selector lever: H (home position) and kept in the Nr and Nd position	On
	Other than the above	Off
Shift sensor 6	Selector lever: H (home position) and kept in the Nd position	On
	Other than the above	Off
Shift sensor 7	Selector lever: H (home position) and kept in the Nd and D position	On
	Other than the above	Off
Shift sensor 8	Selector lever: H (home position) and kept in the Nd and D position	On
	Other than the above	Off

 Without CONSULT

1. Set the vehicle to READY.
2. Operate the selector lever and check the voltage between electric shift control module harness connector and ground.

**CAUTION:**

- When "P07ED-00" is detected, the values of multiple shift sensors become abnormal.
- Perform the operation safely with the wheels blocked, the brake pedal depressed, and the vehicle stopped.

Electric shift sensor	+		-	Condition	Voltage	
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No.8		40			

Is the inspection result normal?

YES>>

Due to the malfunction of the electric shift sensor, replace the electric shift selector. Refer to [ELECTRIC SHIFT SELECTOR : Removal & Installation](#).

NO>>

Repair or replace the error-detected parts.



# Wiring Diagram

Click link to [Wiring Diagram](#).

Sample

# Description

SIEMD-7201779

Because the electric shift control module stores the parking actuator P position information, it is necessary to erase and relearn the learning value when the following work was performed.

- Replacement of the electric shift control module
- Replacement of the reduction gear
- Removal and installation of the parking actuator



**NOTE:**

**The parking actuator is replaced together with the reduction gear assembly.**

Sample