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2015 Nissan Quest Service and Repair Manual

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	+				
Electric shift sensor	Electric shift control module		-	Condition	Voltage
	Connector	Terminal			
				and Nr position	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
110.2		5		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
140.5		50		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
110.4		3,		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
110.5		ŗ		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
110.0		2		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
140.7		33		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
110.0		70		Other than the above	2.8 - 3.2 V

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<u>GO TO 2</u>.

2. ELECTRIC SHIFT SENSOR POWER SUPPLY INSPECTION

- 1. Power switch OFF.
- 2. Disconnect electric shift selector harness connector.
- 3. Power switch ON.
- 4. Check the power source circuit of the troubled shift sensor confirmed in the step 1.
- 5. Check the voltage between electric shift selector harness connector and ground.

	+				
Electric shift sensor	Electric shift selector	r	-	Voltage	
	Connector	Terminal			
No.1					
No.3		1			
No.5		1			
No.7	M200		Ground	Approx E.V	
No.2	W1200		Ground	Approx. 5 V	
No.4		12			
No.6		13			
No.8					

Is the inspection result normal?

YES>>

GO TO 4.

NO>>

GO TO 3.

3. CHECK THE CIRCUIT BETWEEN ELECTRIC SHIFT CONTROL MODULE AND ELECTRIC SHIFT SENSOR (SENSOR POWER CIRCUIT)

- 1. Power switch OFF.
- 2. Disconnect electric shift control module harness connector.
- 3. 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	
Electric simit sensor	Connector	Terminal	Connector	Terminal	Continuity	
No.1						
No.3	M202	19		1	– Existed	
No.5	IV12U2	19	- M200			
No.7						
No.2						
No.4	M203	48		13		
No.6	IVIZUJ	40		15		
No.8						

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

	Electric shift sensor	Electric shift control mod	lule		Continuity
Electric shift sensor		Connector Terminal		_	Continuity
	No.1	M202	19	Ground	Not existed
	No.3				

The delical life and an	Electric shift control mod	lule		Carri	
Electric shift sensor	Connector Terminal		_	Continuity	
No.5					
No.7					
No.2					
No.4	M203	48			
No.6	W12U5	40			
No.8					

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 ELECTRIC SHIFT SENSOR GROUND CIRCUIT

- 1. Power switch OFF.
- 2. Disconnect electric shift control module harness connector.
- 3. 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
Electric simit sensor	Connector T		Connector	Terminal	Continuity
No.1					
No.3		41		12	
No.5		41			
No.7	M203		M200		Existed
No.2	W1203		W1200		Existed
No.4		50		24	
No.6		30		24	
No.8					

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

Electric shift sensor	Electric shift control	l module		Continuity	
Electric shift sensor	Connector	Terminal]_	Continuity	
No.1	M203		Ground	Not existed	
No.3		41			
No.5		41			
No.7					
No.2		50			
No.4					

Electric shift sensor		Electric shift control mod	lule		Continuitor	
	Electric silit sensor	Connector	Terminal		Continuity	
	No.6					
	No.8					

Is the inspection result normal?

YES>>

GO TO 5.

NO>>

Repair or replace the error-detected parts.

5. CHECK THE CIRCUIT BETWEEN ELECTRIC SHIFT CONTROL MODULE AND ELECTRIC SHIFT SENSOR (SENSOR SIGNAL CIRCUIT)

1. 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 sel	Electric shift selector	
Electric shift sensor	Connector	Terminal	Connector	Terminal	Continuity
No.1		34		2	
No.2		35		14	
No.3		36		3	
No.4	M203	37	M200	15	Existed
No.5	101203	44	W1200	4	Existed
No.6		45		16	
No.7		39		5	
No.8		40		17	

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

Electric shift sensor	Electric shift control mod	dule		Continuity	
Electric sinit sensor	Connector	or Terminal		Continuity	
No.1		34			
No.2		35			
No.3		36	Ground	Not existed	
No.4	M203	37			
No.5	101203	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 <u>ELECTRIC SHIFT SELECTOR</u>: <u>Removal & Installation</u>.

NO>>

Repair or replace the error-detected parts.



DTC DETECTION LOGIC

DTC	1	CONSULT screen terms	DTC detection condition	
			Diagnosis condition	Power switch ON
			Signal (terminal)	CAN communication
U18A0	88	CAN Communication Error	Threshold	CAN communication from the electric shift control module was shut off.
				(Communication is not established.)
			Diagnosis delay time	2 seconds or more

POSSIBLE CAUSE

Harness or connectors

(Open or short-circuit of the CAN communication line)

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. Set the power switch to ON and wait at least 5 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 DTC Inspection Priority Chart.).

Is "U18A0-88" 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

For the trouble diagnosis procedure, Refer to <u>Trouble Diagnosis Flow Chart</u>.



DTC DETECTION LOGIC

DTC		CONSULT screen terms	DTC detection condition		
			Diagnosis condition	Power switch ON	
			Signal (terminal)	CAN communication	
U18A1	86	CAN Communication Error (BCM)	Threshold	Invalid CAN communication signal from BCM was received.	
			Diagnosis delay time	2 seconds or more	

POSSIBLE CAUSE

• Harness or connectors

(Open or short-circuit of the CAN communication line)

- CAN bus of electric shift control module
- BCM

FAIL-SAFE

No impact to vehicle behavior