

DTC	P1780/97	PARK/NEUTRAL POSITION SWITCH MALFUNCTION
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CIRCUIT DESCRIPTION

The park/neutral position switch detects the shift lever position and sends signals to the ECM.

The ECM receives signals (PNP SW, REVERSE, DRIVE, 2ND and LOW) from the park/neutral position switch.

DTC No.	DTC Detection Condition	Trouble Area
P1780/97	When driving under conditions (a) and (b) for 30 sec. or more, park/neutral position switch is ON (N range): (2 trip detection logic) (a) Vehicle speed: 70 km/h (44 mph) or more (b) Engine speed: 1,500 – 2,500 rpm	<ul style="list-style-type: none">• Short in park/neutral position switch circuit• Park/neutral position switch• ECM

INSPECTION PROCEDURE

1 READ VALUE OF HAND-HELD TESTER

NOTICE:

The values given below for "Normal Condition" are representative values, so a vehicle may still be normal even if its value differs from those listed here. Do not depend solely on the "Normal Condition" here when deciding whether or not the part is faulty.

- (a) Shift the shift lever to the P, R, N, D, 2 and L ranges, and read the NSW, REVERSE, DRIVE, 2ND and LOW signals on the hand-held tester.

OK:

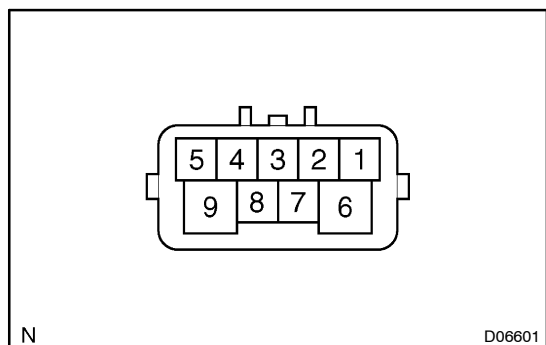
Shift Range	Signal
P/N	NSW [OFF] → [ON]
R	REVERSE [OFF] → [ON]
D	DRIVE [OFF] → [ON]
2	2ND [OFF] → [ON]
L	LOW [OFF] → [ON]

OK

CHECK AND REPLACE ECM (See page 01-30)

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2 INSPECT PARK/NEUTRAL POSITION SWITCH ASSY



- (a) Remove the neutral start switch.
(b) Check continuity between each terminal shown below when the shift lever is moved to each range.

Shift Range	Terminal No. to continuity	
P	1 – 3	6 – 9
R	2 – 3	–
N	3 – 5	6 – 9
D	3 – 7	–
2	3 – 4	–
L	3 – 8	–

OK:

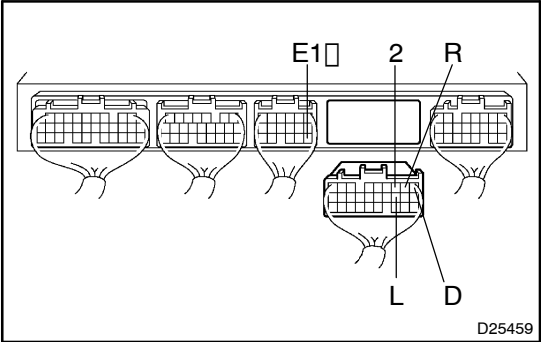
There is continuity.

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REPLACE PARK/NEUTRAL POSITION SWITCH ASSY

OK

3 CHECK HARNESS AND CONNECTOR (PARK/NEUTRAL POSITION SWITCH – ECM)



- (a) Connect the park/neutral position switch connector.
- (b) Disconnect the ECM connector.
- (c) Turn the IG switch ON and measure the voltage between terminals R, D, 2, and L of ECM and the E1 when the shift lever is shifted to the following range.

OK:

Shift position	Terminal	Voltage (V)
R	R – E1	7.5 – 14
D	D – E1	7.5 – 14
2	2 – E1	7.5 – 14
L	L – E1	7.5 – 14

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REPAIR OR REPLACE HARNESS OR
CONNECTOR (See page 01-30)

OK

CHECK AND REPLACE ECM (See page 01-30)